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**A SYSTEMIC  
MANAGEMENT  
APPROACH TO SKILLS  
DEVELOPMENT WITHIN  
AN ORGANISATION**

By

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## **A SYSTEMIC MANAGEMENT APPROACH TO SKILLS DEVELOPMENT WITHIN AN ORGANISATION**

The Skills Development Act has recently become law in South Africa. The act seeks to develop and enhance the skills of the workforce and proponents argue that it encourages companies to become learning organisations. Under this law, employers are obliged to pay a skills development levy. The levy is essentially a tax, a portion of which can be reclaimed depending on the type of training a company undertakes. The purpose of this project is to explore the implementation of skills development within the new paradigm created by the legislation.

One of the challenges that the new paradigm creates is that the Act is without precedent in South Africa. This presents problems for those implementing a skills development strategy, based on the Act, because there are very few local examples to follow. Internationally, there are instances of Skills development legislation and one of the questions I began the research with was whether these models would be applicable to the local context. At the start of this project the field of skills development, beyond the standard training programs, was relatively new to me as a manager. Being a newcomer, I was faced with the danger of using too mechanistic an approach to the problem. A mechanistic approach to skills development, an approach which fails to see skills development in as part of a broader context could be detrimental to implementation. Proponents of the act claim that it encourages companies to become learning organisations and I also began by questioning this claim.

I have taken a qualitative research approach to skills development challenge. I believe that the qualitative approach is more appropriate to the topic mainly because it's focus is away from the traditional statistical type of analysis and more towards the analysis of intentions, beliefs and the words that convey these qualities. Qualitative research is geared more towards social systems study. The approach is also one of action research with the intention of deriving benefit not only for me but also for those involved in the project. Consequently, I sought not only to research the topic but also to bring about improvements in the situation, both for myself and for the organisation.

The focus of this project is two-fold. The project has a broad area of concern, which is my own management practice, and a field of focus for the research, and this began as skills development in an organisation. In the spirit of Action research, I have tried to achieve results both for myself and for the organisation where the research was conducted. Concerning my own management practice, I began by questioning my own approach to managerial problem solving.

The research into the field of focus begins with the development of a training database to fulfil the requirements as laid out in the Skills Act. The initial results from the database form part of the first cycle of the research project. The second learning cycle begins with the formation of a Skills consultative Forum at the organisation. The results of the database are placed into context within this forum and also within the expanding context of other developments at the organisation. Employment

Equity, the formation of an Export venture and Activity Based costing served to expand the context of the research project and impacted upon the Skills Development process. During the course of the second cycle I began to question the relationship between skills and competence and also what was required for development to take place. The final cycle of the project explores these questions in greater detail. The project ends with a management model for competence development (result for the organisation) and a revised model for managerial problem solving (result for myself).

One of the features of qualitative research is the emergent design process. In this approach, data collection and analysis are simultaneous and ongoing activities that allow for important understandings to emerge or be discovered along the way. As meaning expands, the project is refocused accordingly. Hence, the initial questions that I started the project with, evolved. In the course of the project, I began to ask how skills development is related to competencies and what drives development in an organisation. Hamel and Prahalad [27] argue that a key challenge in competing for the future is to preemptively build the competencies that provide gateways to tomorrow's opportunities. They also conceive of competition for the future essentially as competition for competence. Their view of the future competition is thus combination of building and acquiring competence. The focus of this project evolved from implementing skills development into questioning how organisational competence can be built.

The results of the project are also two fold. The primary outcome of the project is my model for managerial problem solving. This model, as shown in figure 35, represents my approach to problem solving. The model incorporates three interrelated components, Problem formulation, Systems Thinking and Qualitative\Quantitative Research. The model is shown to be *one* aspect of leadership. Research into the building of competence resulted in a model that was developed by the managers at the organisation. The model is an answer to the question of how best to enhance the skills development process. It should also be noted that, in the spirit of qualitative research, the model is seen as a representation of the beliefs, values etc, of those who developed it and I have not attempted to argue that it is a generic model. Rather, I have explored the meaning of the model for those who developed it. The model for competence is also supplemented by the training database as discussed in the final reflection of this report.

In the course of this project, my approach to managerial problem solving and change management developed and qualitative research facilitated this developmental process. A narrow focus on skills development was broadened into a more comprehensive view of nurturing competence in the organisation. The underlying factors that the management team views as driving competence were brought to the fore and are currently part of a debate at the organisation. Mentorship was highlighted as one of the leverage points for the skills development intervention and the database that was developed during the course of this project is proving to be an invaluable tool in this process. The extension of the database into other areas of the business such as Activity based costing is also serving to enhance the competence debate.



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## **Chapter 1: Background of my thesis**

### **1.1 Introduction**

This thesis comprises a broad area of concern and, within that area, a specific field of focus for the research project. The primary aim of the thesis is to yield improvements in my management practice and this is the broad area of concern for the research. The underlying philosophy in the OMDP course is based largely on the work of W Edwards Deming. This philosophy is based on fundamental principles and is pragmatic in approach. A typical quote in this regard is

“You can’t claim knowledge if you can’t show results”

Thus, for knowledge to be claimed, results must be shown not only for the manager but also for the field of focus, or in my case, for the organisation that I work for. In order to improve my management practice, I have selected a field of focus in the organisation, namely that of Skills Development. As a Project Manager, with an Engineering background, I am a newcomer to the field of Skills Development. I initially became involved in the project due to a request to write a database for the compilation of skills plans within the organisation. After my initial involvement, I decided to conduct the research project in the area of Skills development not only because of the enormous potential that proponents claim it has for an organisation but also because it would be an opportunity to work in the area of soft systems modelling. Soft systems are generally human systems i.e. people and the relationships between them are the primary “parts” in the system. This is in contrast to hard systems e.g. operation of a disk brake system, where the amount of human involvement is very limited. Senge [5] submits that systems thinking readily finds application in management practice, “where the aim is to find leverage points for maximum effective action”. Hence one of the results which this research intended to achieve was to establish whether such leverage points do indeed exist, within the soft system under focus, and then to evaluate these points with a view to providing a locus for management decisions. Within the broad area of concern, as outlined above, a specific field of focus was selected, namely that of Skills Development.

After six years of negotiations between Business, Labour and the South African Government, the Skills Development Act has become law. The Skills Development Levies Act supplements this act, which is essentially a tax. These acts are primarily concerned with industry-based training, improving the intermediate level skills base of the country and labour market training for target groups. The fact that this Act is fairly new means that research into the implementation of the Act is very limited. Thus literature on skills development and the implementation thereof was mainly sourced from international journals that cover this field. The initial research uncovered the current trend where the skills development is seen as part of a broader field, namely that of Competence. Hamel [27] argues that future competition between organisations will, in essence, be a competition for competencies. He contends that farsighted companies compete for access to the individual skills and technologies that comprise competencies. This concept forms a major theme for the research project i.e. if one accepts Hamels’ thesis, then instead of merely identifying competencies, would it not be better to supplement this with a focus on the nurturing and development of competencies. Hamel asserts that the competencies should be considered core if, amongst other factors, they can outlast the products that result from their application. This is he refers to as the transcendent aspect of a competence. Thus the level of abstraction of the research topic increased during the course of the project, from skills development to one of attempting to answer to question of what factors are required in order to nurture competence.

### **1.2 The two arguments of my thesis**

The broad area of concern for this project is that of management practice. In order to improve my management practice, I developed **a model for managerial problem solving and this model is**



presented in figure 2, and a refined version is presented in the final chapter of this report - the reflection. The model is built primarily on the theoretical foundations of the OMDP course and my own research into management practice, undertaken during the course of this project. In essence, the model argues for an integrated approach to managerial problem solving in organisations. The model argues that Problem Formulation (agenda's, definitions, stakeholders, participation) is only one part of *managerial problem* solving and that Systems thinking and Qualitative research (QR) are also necessary components for an integrated approach to problem solving. This integrated approach is typically what is required within the context of managerial problem solving, where the human dimensions of a problem are often those which create or, at the very least, compound the complexity of a problem. Implicit in the model is that it is particularly suited to soft systems problem solving, as described in the previous section, and this is elaborated on in the QR section of this report (section 2.3).

Within my broad area of concern, as outlined above, the field of focus for the research began with Skills development. As my research into the topic progressed, it became evident that skills development formed part of a broader field, that of competence. **A model for Competency Development is presented in figure 31.** This model was the main outcome of the research and one of the main benefits that this project had for the organisation that I work for and where the project was conducted. The model shows the factors that are required in order to develop competence, and hence skills, within this organisation. More importantly, the relationships between the contributory factors in the model, the nodes shown in figure 31, are defined and explored. The leverage points that Senge refers to (see previous page) were exposed during the development of this model and are clearly shown i.e. Mentorship focusing on multi-Skilling is a leverage point for an intervention in skills development, within this organisation. The model and subsequent debate that it generated were major successes in the course of the project, providing a locus for further intervention, as agreed to amongst the managers. The model was developed by the management team at the organisation and my role in this process was essentially one of facilitating the development of this model. Once the model had been developed, my research focus shifted to exploring the model in greater depth, using the QR approach. It is important to recognize that the model is an answer to a problem (Competence Development) as developed by a particular management team working within a particular context. The model may not suit another management team or organisation and I did not set out to validate the model but rather to explore its meaning in greater depth with the individuals who had developed it. This was in keeping with the spirit of QR.

### **1.3. The structure of the thesis**

The thesis begins with a presentation of a model that I have developed and propose as a model for managerial problem solving, which is the broad area of concern for the project. An overview of the triadic model described above (figure 2) is given and then the three parts of the model, Problem Formulation, QR and Systems thinking, are explained in greater detail in chapter 2. The relationships between these three components were viewed as being equally important as the components themselves and thus the parts of the model are brought together and discussed at the end of chapter 2. It should be noted that the triadic problem solving model (figure 2) evolved during the course of the project, indeed the final triadic structure only came to light after much of the research had already been conducted, although each part was being used and refined throughout the course of the project. This model is my answer to the broad area of focus for the project, namely that of management problem solving, and hence it is presented in the following Chapter. Change management is then introduced in chapter 3. Change Management forms an important part of any intervention and this section highlights the approach to change management that I used in the course of the project. Change management also forms an integral part of my problem solving model (figure 2) but, in my view, it is not specific to any one of the three nodes of the model but rather Change management forms part of all three aspects in my approach to problem solving, specifically the relationships between the Problem Solving, Systems



Thinking and QR and hence a separate chapter. The Chapter on Change also forms the bridge between the broad area of concern in the project, my management practice, and the specific field of focus, Skills development, which is dealt with in chapter 4.

The intervention itself is explained in chapter 4 which begins with a background into context i.e. Skills Development, and then describes the three phase process of the project. It should be noted at this point that part of the paradigm of Qualitative research is that is emergent design. Hence as the project evolved, so my understanding of the subject and the area of focus of the research, also evolved. This path was skills---→ Competence--→Competence Nurturing. Thus theory, pertaining to the field of focus, is also presented in chapter 4 as part of showing this process of emergent design. This theory pertains to the development of the Competence model which, as described above, is the field of focus, within the broad area of concern, in this case, management practice. The final chapter of the report is an evaluation of the project as a whole and on the two models that were developed during the project. My model for managerial problem solving is also refined in this chapter as part of the final reflection and a **revised version of the model is shown in figure 35**. This reflection is final only in terms of this report and as I continue to practice as a manager I assume at this point that learning will continue and the model will be refined accordingly - the learning does not stop.

#### **1.4 Summary**

In this chapter I have described the background to this project and presented the two arguments central to my thesis. I have also described the structure of this thesis. In the following chapter, I present a model for managerial problem solving. This model forms the theoretical basis of the project.

## **2. Organisational Problem Solving**

In this chapter I present my model for managerial problem solving. This model describes my approach to the broad area of concern for this project - problem solving.

### **2.1 Introduction**

Managers and organisations face new challenges in the workplace on an ever-increasing scale: variety, volatility and turbulence. The rapid evolution of strategic initiatives such as re-structuring, downsizing and re-engineering (BPR) combine the aforementioned factors into a force that challenges the viability of almost every organisation and, in the previous decade, very few businesses were immune from the effects of such changes. Globalisation and the information age have also introduced new elements of complexity into many industries. As international companies position themselves for the current decade, mega-mergers, joint ventures and brand consciousness have become the order of the day. The reduction of trade barriers presents import/export opportunities that are of particular interest to companies operating on a global scale. Compounding the situation are the ever-increasing number of management fads – starting with much vigour and enthusiasm but often ending up as white elephants. Authors such as Mitrov [1] argue that programs such as Total Quality Management (TQM) and downsizing are worthless fads, *if they are conceived of* as "cure-alls, and especially if they are jettisoned as soon as the next cure all appears on the horizon". Hamel [27] contends that "restructuring seldom results in fundamental business improvements. It buys time.... can raise a company's share price, but improvement is almost always temporary". Downsizing is viewed by management authors such as O'Brien [49] as "dealing with past mistakes instead of future markets". Faced with the above problems (or opportunities) managers are often left asking whether money is being thrown at problems, arguing that there is no concomitant return on investment in these attempts (TQM, BPR etc) by management to solve the complex problems facing organisations. Indeed, the poor implementation of fads, parading as solutions in the fashion described by Mitrov above, can potentially compound the complexity of the original problem by setting precedents, which may then serve to limit the effectiveness future changes. In my own practice as a manager I have observed, on more than one occasion, the scenario where a team is brought together to solve a problem, short term results are achieved, applause is forthcoming and six month later when the focus has shifted away from the problem, the situation reverts to it's original state. Some observers refer to this as a recurring problem. Systems thinkers often refer to the classical "vicious cycle" that certain problem tend to follow. In solving a problem, sustainability of the solution is also an important issue. Thus, a key concern for future management is *how to manage this complexity*.

In the South African context, another factor facing organisational problem solvers is the dilemma of applying solutions that are developed in America, Europe, and the Far East etc. *Could this also be fad? Are these solutions applicable in the South African business environment? Can managers proceed on the assumption that what works in another country will work in South Africa?* The questions give credence to the call in certain local publications for *African solutions to African problems*. The argument being that, although certain problems that organisation in different parts of the world face may be *seemingly* similar, perceived solutions such as TQM cannot be applied like templates. Proponents of this view also argue that problems cannot be assumed to be closed to environmental influences such as culture, religion, politics etc. Faced with the above challenges, a key question in this research project is *how to develop sustainable solutions to the problems occurring in modern organisational life*.

Problem solving was initially studied by psychologists. In 1972, Newel and Simon [47] proposed a general theory of problem solving. The basis for their theory relied on 'means-ends' analysis which, at each step of problem solving, determined how close a solution was and what was required to

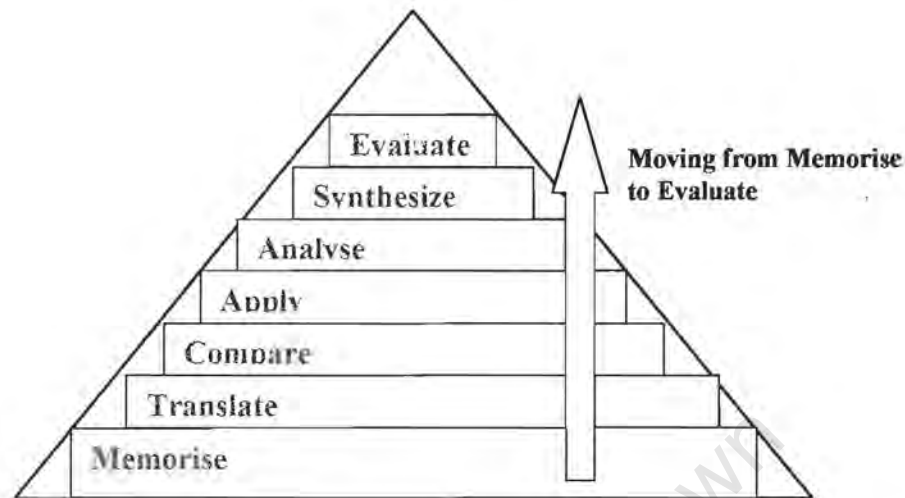
bridge the gap between desired and actual results. This research into problem solving focussed on clearly structured, puzzle like problems, that, as Simon reflects [47], were easily brought into the (psychological) research laboratory. Current research into problem solving attempts to gain an insight into the problem solving process where goals are complex, ill defined and where the nature of a problem evolves in the course of attempting a solution. These types of problems evidenced in many human institutions and businesses and hence this provides the ideal laboratory of the development of a problem solving model.

The following section presents a model for organisational problem solving. The basic framework of the model is first presented and then each part of the model is described in detail in the sections thereafter. The sections of the model are then synthesised at the end of this chapter. Chapter Three describes my approach to Change Management. I argue that change management is part of the essence of the problem solving model and hence this chapter serves as a bridge to the actual implementation and testing of the model which forms the content of Chapter Four, the research topic at hand, a Skills Development process within an organisation-Chapter Three.

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### 2.1.1. A Model for Organisational Problem Solving

Learning has been defined as the process of making new or revised interpretations of an experience [48]. Dixon refers to learning as the act of interpreting experience. The pyramid of learning is a meaning scheme or a rule for learning. Within the pyramid are the various stages of learning, each with their own rules, which are based on meaning perspectives or principles for interpreting.

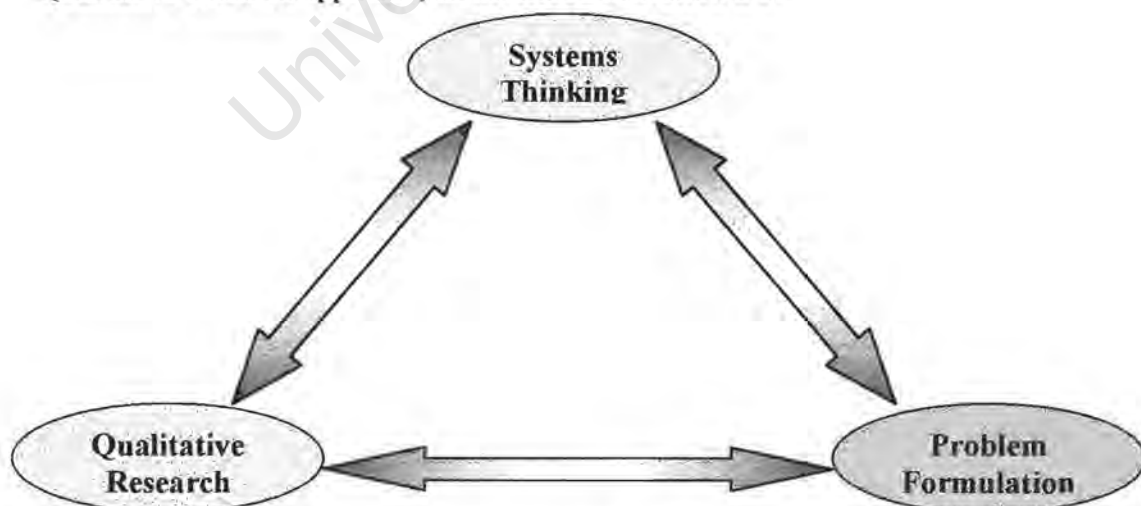


**Figure 1: Meaning scheme for Pyramid of Learning [50]**

Interpretation is taken as the stage from comparison to evaluation. Thus as one moves up the pyramid, meaning structures are expanded through interpretation. During the course of this project, I developed a model for problem solving, which is a synthesis of the study materials presented in the OMDP course and is presented below. The theoretical foundations of the model are then described in greater detail in the following sections of this chapter.

The model advocates a three-pronged approach to managerial problem solving. The model is interactive in the sense that:

1. Each part is related to the other and these relationships are as important as the nodes.
2. Each node of the model contains interactive parts e.g. Action Research is used as part of the Qualitative research approach, as described in section 2.3.



**Figure 2: Triadic framework for Managerial Problem solving**

### **2.1.2. Problem Formulation.**

Mitrov [1] observes that many organisations devote a lot of energy to solving the wrong problems precisely and in the most efficient way. The following four-step process is recommended [1]:

1. Acknowledging or recognising the existence of a problem
2. Formulating/defining the problem.
3. Deriving the solution to the problem.
4. Implementing the solution

An important stage in the problem solving process is the definition stage. There is the wise saying that “the person who controls the definition of a problem controls its solution.” Or “a problem well put is half solved”. From the world of systems thinking, there is also the well-known phrase “it is better to get the wrong answer to the right question than to get the right answer to the wrong question”[3]. All of these statements allude to the problem definition stage and that solutions are very often limited by their problem definitions. Simon [47] argues that the way in which problems are represented has much to do with the quality of the solutions that are found. In reaching a problem definition, the following strategies are recommended:

<b><u>1. Pick the Right Stakeholders</u></b> Never make an important decision or take an important action without challenging at least one assumption about a stakeholder; also, consider at least two stakeholders who can or will oppose the decision or actions.
<b><u>2. Expand Your Options</u></b> Never accept a single definition of an important problem; it is vital to produce at least two very different formulations of any problem deemed important.
<b><u>3. Phrase the Problem Correctly.</u></b> Never produce or examine formulations of important problems phrased solely in technical or human variables; always strive to produce at least one formulation phrased in technical variables and at least one phrased in human terms.
<b><u>4. Expand the Problems Boundaries.</u></b> Never draw the boundaries of an important problem too narrowly; broaden the scope of every important problem up to and just beyond your comfort zone.
<b><u>5. Be Prepared to Manage Paradox.</u></b> Never attempt to solve an important problem by fragmenting it into isolated and tiny parts; always locate and examine the broader system in which every important problem is situated; in many cases, the interaction between important problems are more important than the problems themselves.
<b><u>Table 1: Five Strategies for Avoiding Solving the Wrong Problem Precisely</u></b> Extract from Mitrov [1]

The strategies in the previous table have been grouped together for discussion in the next section – multiple perspectives. Mezirow [51] argues that "perspectives provide principles for interpreting". Multiple perspectives are a crucial part of problem solving and the process involves drawing in stakeholders and viewpoints, as an **essential starting point** in the problem solving process. Simon [47] reflects that the task of setting an agenda is of utmost importance because both individual human beings and human institutions have limited capacity for dealing with many tasks simultaneously. This could be interpreted as team work but also has broader ramifications as described in the following section.

### 2.1.3. Stakeholders and Multiple Perspectives

In forming a problem definition, stakeholder participation is extremely important from two perspectives:

1. The involvement of the stakeholders allows for the problem statement to be reviewed and other opinions solicited. What may seem an insurmountable problem for one person may be the wrong problem to work on for another person. Stakeholders must first acknowledge that a problem does indeed exist and is worthy of managerial effort.
2. Implementation of solutions is very often hampered due to lack of buy-in. This means that one of the stakeholders has not been involved in the problem definition stage and therefore refuses to participate in any proposed solution. A possible cause of this could be that the stakeholder holds the perception that the wrong problem is being addressed.

The process of drawing in stakeholders with the aforementioned factors in mind is known as multiple perspectives. The power of multiple perspectives lies in the fact that the perspective on the problem is widened. This can contribute towards minimising the possibilities of treating problem symptoms and not causes.

Multiple perspectives also provide a filter for assumptions and beliefs. Mitrov [1] argues that assumptions must be challenged in order to reach a problem definition. This can be a difficult phase and a level of maturity is required to embark upon this task, whether in the individual, team or organisational setting. The testing of assumptions common theme in this project and is referred to later when the subject of learning organisations is introduced. Mitrov suggests that when one begins the problem definition stage, that ones own assumptions about stakeholders should also be challenged. For example, a manager may assume that a certain group of people may have no interest in a problem. *Simply asking* these individuals whether they are interested or not is one way to test this type of assumption. Another advantage is that individuals may have a particular insight into a problem and this insight could be useful in reaching a more effective problem definition. This sharing of insights is referred to in the above table as "Expanding the Boundaries". Mitrov recommends that the problem solver should attempt to expand the problem boundaries just beyond his/her level of comfort with the boundaries. Assuming that a certain group of people are not interested often leads to a lack of willingness to share insights, in the best case. The worst-case result occurs when a group of stakeholders are insulted (in this case by being ignored) and this will have serious repercussions on the impact and sustainability of any proposed solutions. Hence, the objective of testing assumption is to widen the perspective on the perceived problem. This will then lead to revision of the problem definition, if required.

Certain basic questions that challenge assumptions are:

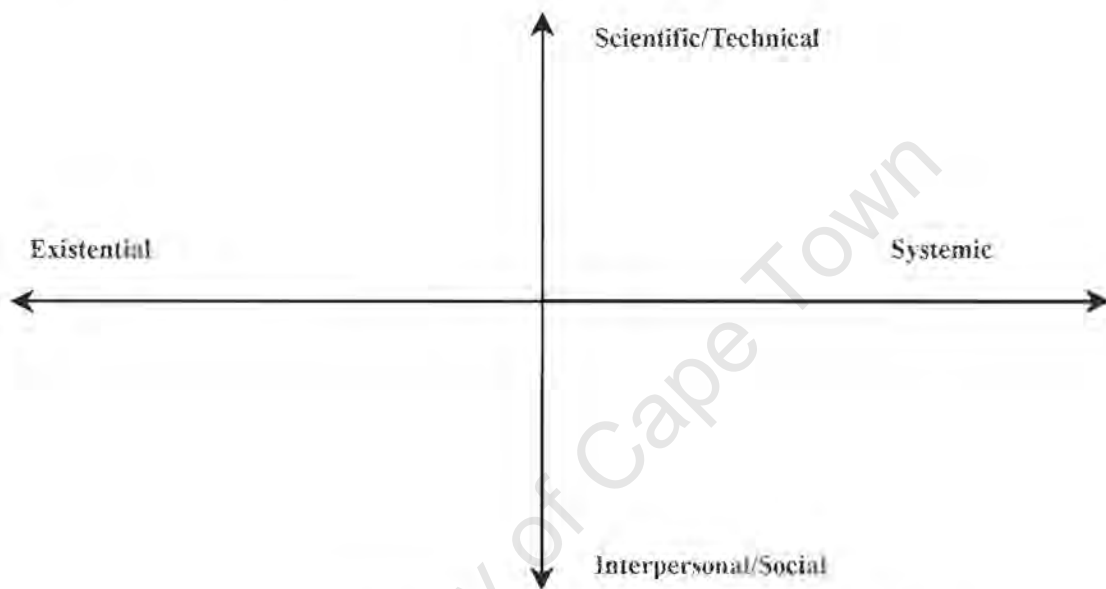
- What business are we in?
- What business should we be in?
- What is our mission/vision/values?
- What should our mission/vision/values be?



- Who are our prime customers/stakeholders?
- Who should our customers be?
- How should we react to a major crisis?
- How will the outside world perceive our actions?
- Will others perceive the situations as we do?
- Are our products and services ethical?

These types of questions challenge basic beliefs that individuals in an organisation hold about that organisation and its operating environment.

Mitrov argues that all problems have significant aspects of four perspectives and this is shown in figure 3.



**Figure 3: Four perspectives of a problem. [1]**

The four perspectives to problem solving, as shown above are described below and it is also noted that this perspective is by no means unique. Authors from other fields have developed similar models. A model for problem solving from the Cybernetics field is discussed later in this section under the Systems Thinking section (see Figure 4).

#### **The Scientific Perspective.**

This includes the technical details of a problem. Boundaries are normally easily drawn and if a problem definition contains only this aspect, the problem can be isolated from its environment. Technical specialists are normally consulted in this respect.

#### **The Social perspective.**

The aspect is concerned the cultural and political dimensions of a problem. This dimension is often neglected by technical people when stakeholders are not correctly identified or consulted and can have serious repercussions.

### **The Existential Perspective.**

This concerns the philosophical and ethical aspects of a problem situation. Basic assumptions are often questioned with a view to identifying the causes of problems. Issues such as justice, meaning and purpose are identified and dealt with in terms of the stakeholder analysis as described above.

### **The Systemic perspective.**

This perspective is concerned with the broader system within which the problem is initially found. Patterns of behaviour are important in assessing whether there are subtler influences on the problem than initially perceived. This perspective is dealt with in more detail later on.

Picking of the correct stakeholders and drawing them into the problem formulation stage i.e. the beginning of a project is crucial to managerial problem solving, as described above. Each person brings their own unique perspectives on a problem and these perspectives serve to widen problem definitions and hence expand options - see Table 1. In phrasing a problem and reaching a definition, paradox can be a stumbling block and it is important to take cognisance of this in the formulation process.

#### **2.1.4 Managing Paradox- Nothing fails like success.**

The transition from the industrial age to the systems age, along with an increasing education level in the general workforce, is causing a swing away from the mechanistic and organismic view of the organisation, to one characterised as a social system. Social systems are systems that have purposes of their own, are made up of parts that have purposes of their own, and are parts of larger systems that also have purposes of their own. These larger containing systems include other systems that have purposes of their own (Ackoff [9]). Systems practitioners agree [30] that one of the characteristics of the systems age is paradox. An understanding of paradox is vital if problems are to be addressed effectively. So what then is paradox?

A paradox is a self-contradictory statement. In logic, paradoxes arise when all of a set of premises are asserted to be true but the conclusion deduced from these premises negates one or more of them. The best-known paradox is that of the Liar, where Epimenedes, the Cretan, claims 'all Cretans are liars' (Cretans never speak the truth). However, Epimenedes, being a Cretan, must have lied when making this claim, so if it is a lie (false) then it must be true. If Epimenedes spoke the truth when he made the claim then he is a truthful Cretan, so if it is true then it must be false [14]. Paradoxes may also occur when any set of beliefs generally accepted as true lead to self-contradictory conclusions. Another potential example of paradox from the world of natural systems is illustrated below.

#### ***"Nothing fails like success."***

Life starts in the sea. There it attains to an extraordinary efficiency. The fishes give rise to types, which are so successful (such, for instance as the sharks) that they have lasted unchanged until today. The path of ascending evolution did not, however, lie in this direction. In evolution Dr Inge's aphorism is probably always right: ***"Nothing fails like success"***. A creature which has become perfectly adapted to its environment, an animal whose whole capacity and vital force is concentrated and expended in succeeding here and now, has nothing left over with which to respond to radical change. Age by age it becomes more perfectly economical in the way its entire resources meet exactly its current and customary



opportunities. In the end it can do all that is necessary to survive without any conscious striving or unadapted movement. It can therefore beat all competitors in the special field; but equally, on the other hand, should that field change, it must become extinct. It is this success of efficiency that seems to account for the extinction of an enormous number of species. Climatic conditions altered. They had used up all their resources of vital energy in adapting themselves to things as they were. They were over-committed, could not readjust, and so they vanished.  
Gerald Heard [55]

Paradox is a characteristic of many systems. The contradictions that are presented by a paradox may force one to reject some accepted belief or to find a way of dissolving the paradox, perhaps by re-interpreting the original beliefs, the conclusion, or the method of argument. Management of paradox requires an acceptance that beliefs and assumptions need to be challenged as part of the problem solving process. It also requires the ability to recognise and accept that paradox is often the norm and not the exception and as such cannot be solved but rather managed within acceptable limits.

### Problem Solving, Paradoxes and Mess Management.

“I have found that philanthropy is riddled with paradoxes and unintended consequences. For instance, charity may turn the recipients into the objects of charity. Giving is supposed to help others, but in reality it often merely serves the ego gratification of the giver”.  
George Soros [54]

A typical business paradox is that *growth equals development*. The paradox presented here is, as Ackoff [9] argues, that garbage heaps grow but they don't develop. Thus, growth equals development, is not always the case. In the Systems age (see next section), parts of an organisation are recognised to be no longer self-standing, but rather tightly coupled. Since the English language has no word for a whole series of interconnected problems, many practitioners have adopted the word “mess”. Russel Ackoff [9] argues traditional problem solving focuses attention upon bits and pieces of organisations and thereby leads us to adopt policies and carry out actions that often make the original situation worse. He suggests that typically we do not face discrete ‘problems’ but rather we face interlocking sets of problems that can be separated only by artificially carving the organisation into pieces. Thus, instead of focussing on problem solving, mess management should rather be emphasised. A typical repercussion of this approach would be the recognition that “today's solutions often become tomorrows problems”. This means that, for example, if a new machine is introduced to improve production, and hence solve one problem, eventually the machine will become outdated and become a problem for the rest of the production system.

The first node of my approach to managerial problem solving as presented in figure 2 - Problem Formulation - has been described above. I argue that picking of the correct stakeholders, acknowledging the problem and drawing them into the problem formulation stage, i.e. **the very beginning** of a project, is crucial to managerial problem solving. Certain pitfalls in the process of reaching a problem definition are also highlighted such as the language used to phrase a problem statement and the inevitable paradoxes that one finds in many problem situations. My approach to paradox is one of consciously recognising paradox and the assumptions that contribute to it. If and when this is achieved, paradox should be managed rather than attempting to solve or eradicate it in the problem solving process. However, formulating a problem does

not solve it. In order solve a problem, the model shown in figure 2 requires that Systems Thinking also be applied.

## **2.2. Systems Thinking.**

The second node of the model for problem solving is called Systems thinking. Systems' thinking was touched on briefly in the previous section (see figure 3) but the principles of Systems thinking form a much broader part of a holistic approach to problem solving, as advocated in Figure 2.

Systems thinking is defined as the art, science and practice of recognizing that everything is part of a greater whole, with all parts interacting. Problems that lend themselves to Systemic thinking include recurring problems, problems with unsustainable solutions and problems that have long and troubled histories [45]. System thinking therefore readily finds application in management practice, where the aim is to find leverage points for maximum effective action. Systems' thinking does not encourage the typical laundry list type approach to problem solving in complex systems. Complex systems can be defined by the following characteristics[29]:

- Complex systems tend to be dynamic, self-stabilizing and self-organising
- Complex systems are or appear to be purposeful and are probabilistic
- Complex systems (like simpler systems) are capable of using feedback to modify their behaviour
- Complex systems are open and can modify and are modified by their own environments
- Complex systems are capable of replicating, maintaining, repairing, and reorganizing themselves.

Furthermore, complex systems exhibit a number of strengths and weaknesses. Conflicting goals between parts comprising the complex system is common. Feedback is often distorted and a loss of predictability is often experienced. The dilemma of centralization versus de-centralization becomes evident.

To ensure a thorough approach to problem solving with complex systems, **Systemic problem** solving requires the following four steps [45]:

System analysis: A common-sense analysis of what, why and how is developed. The objectives of the system under study are defined and data collected on its performance. It is particularly important to try and identify patterns of behaviour in order reach an understanding of the underlying systemic structure.

System design: A model is built and used to simulate and explore ways to operate the system.

Implementation: The results of the study are presented and based on the approval of these results by the relevant stakeholders, optimisation of the system is sought.

Operation: The optimised system is handed over to those who will operate it on a routine basis. Care is taken to avoid inefficiency and misunderstanding.

These four steps are similar to the steps recommended by Mitrov (see pg 6) although much of Mitrov is devoted to the phases leading up to systems design i.e. stakeholder buy-in etc. It should also be noted that handover does not imply that those who are operating the system are presented with something in wrapping paper. The problem formulation node of the problem solving model requires that all stakeholders are drawn into the process at the very beginning. This means that those who are required to operate any system are involved **right from the beginning**. A systemic approach to this is presented later in this section (fig. 15).

When faced with a complex problem, the question as to whether the systems approach will be of benefit or could delay the process can be answered by looking for the following three characteristics.

1. Policy resistance:

*A policy statement incorporates four components – the goal of the decision point, the observed conditions as a basis for decision, the discrepancy between goal and observed conditions, and the desired action based on the discrepancy.* Forrester [45]

Complex systems tend to resist attempts to change their behaviour.

Policy resistance occurs when managers experience and witness short-term improvements as a result of new policies, only to find the same problems recurring. Policy changes are often ineffective because they are based on a non-systemic understanding of problems. Senge identifies *compensating feedback* as one of the main reasons for this occurrence. A problem is defined in terms of its most obvious symptoms and these symptoms are then treated. This results in the problem reoccurring and the classic "vicious cycle" – the problem's underlying cause has not been identified and the wrong aspect of the problem is receiving attention.

Senge also warns against interventions resulting in *better-before-worst* behaviour and interveners getting caught up in a *reinforcing spiral of intervention*. There has to be a clear distinction between cause and effect, which are often not clearly related.

2. The nature of causality:

Here the essence of the systems perspective is that problems arise due to the *interactions* of different parts of a system. The system itself causes its behaviour and people are often the most important part of the system. Furthermore, the systems perspective focuses on the underlying structure of interrelationships among reinforcing and balancing loops which form the character of the system.

Often managers assume that cause and effect relationships are obvious to identify and closely related in time and space. A systemic perspective does not make this assumption.

3. Leverage points:

A systemic approach distinguishes between high- and low- leverage policy changes. Understanding the systemic causes of problems in a complex system reveals high-leverage points, which will result in long-term changes. The difficulty arises when these causes are often non-obviously related in time and space.

4. Mode of Behaviour.

Every system has two fundamental modes of existence and behaviour: stability and change. When designing an intervention, it is important to understand what the current mode of behaviour of the system is. Change management is explored in further detail in the next chapter.

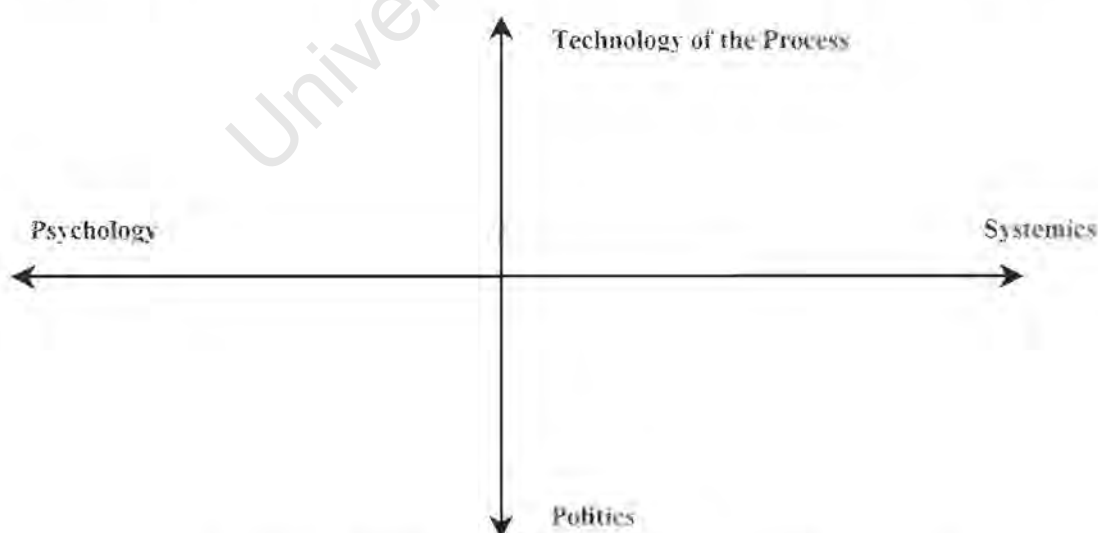
Systems practitioners stress that it is important to realise that there is **never a single right answer to any question**. Senge [4] argues that a system should not be redesigned through focusing on its parts, but rather, the whole should be viewed together. This approach could also be termed holistic and this, together with role of causality are the key concepts of Cybernetics.

### **2.2.1 Cybernetics**

Clemson [3] defines Cybernetics as the science of effective organisation. Cybernetics is concerned with the general patterns, laws and principles of behaviour that characterise complex systems. In this context a systems can be dynamic, open, and probabilistic. Cybernetics asks not “what a thing is?” but rather “what does it do?” Cybernetics deals with behavioural patterns in so far as they are regular or determinate or reproducible [3]. A key notion of cybernetics is that of causality. Circular causal processes are generally called feedback. Cyberneticians assert that systems which include feedback loops are capable of very complex behaviour and that quite subtle changes in the relationship at one point in the system can have very large scale effects in changing system behaviour. This was referred to as leverage points in the previous section. Establishing these leverage points is primary objective in the design of an intervention.

Another fundamental insight of cybernetics is that many systems exhibit ‘holistic’ behaviour. In these systems, the whole is more than the sum of the parts and the characteristics of the whole can be primarily understood by examining the interaction of the parts in relation to the whole. An example of this could be a finger. What makes a finger just that, is it’s relation to the body and the defining characteristics and behaviour of the finger can only be properly understood by examining the relationship between the finger and the rest of the body. If the finger were cut off it would cease to be a finger but only a collection of flesh and bone. The two principles of Holism and Causality are expanded on in the glossary and the cybernetic laws are given in [appendix J](#). When there are particular defects or pathologies that seem localised but resistant to treatment, there is a good probability that these laws are being violated.

Although cybernetics has been defined as a science, when applied to management, it is more apt to describe it as an art. This is due to the fact the management often involves politics and psychology. Many observers have argued [1] that inspired management i.e. leadership, involves more psychology and politics than anything else. The cybernetic approach to problem solving within business organisation comprises these two soft issues as well as two harder dimensions are shown below. The following diagram has been adapted from Clemson and there is a clear convergence of ideas in the problem solving approach between Clemson and Mitrov (comparing figures 3 and 4).

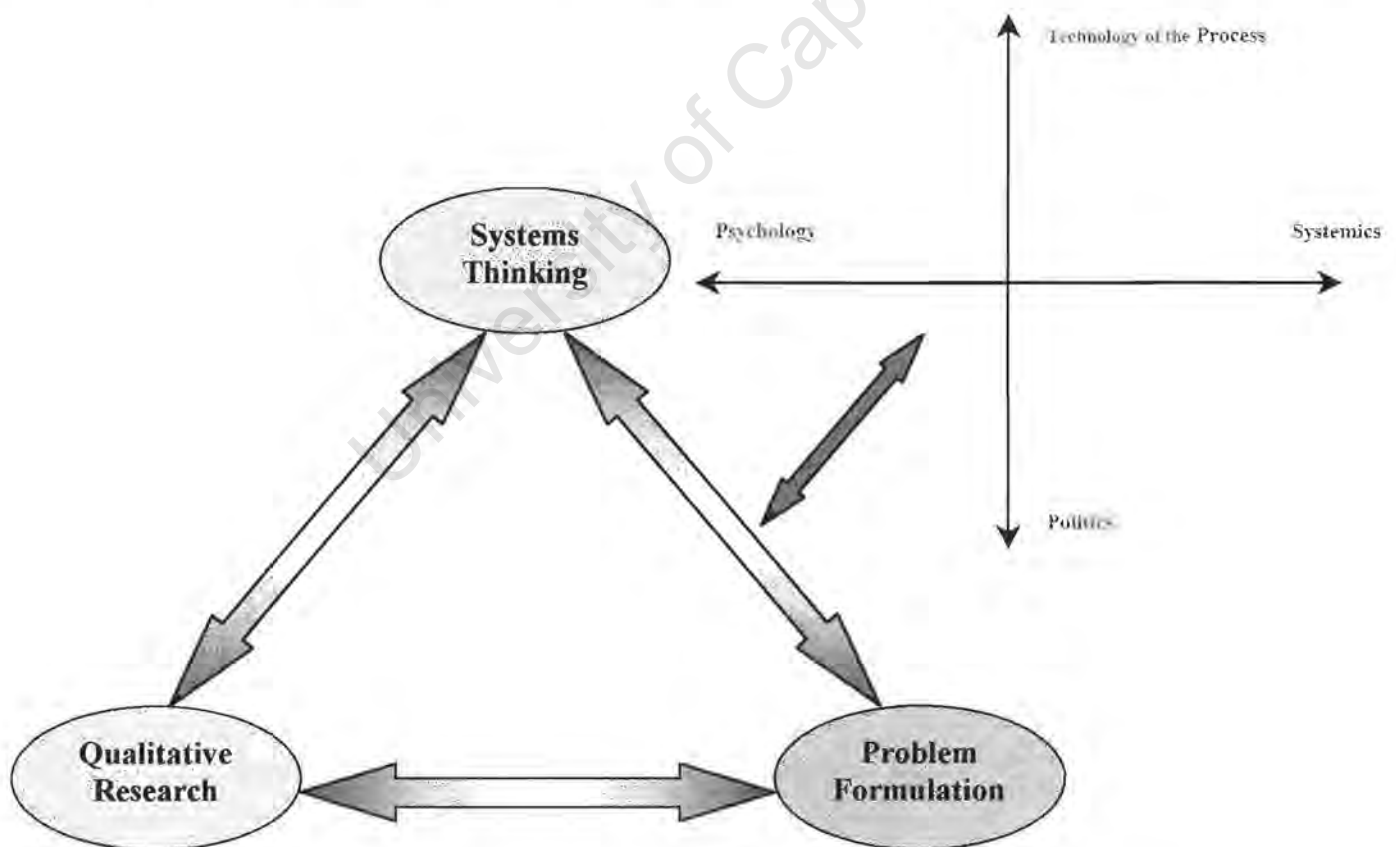


**Figure 4: The Art of Management Cybernetics [29]**

The above figure illustrates that cybernetics cannot be used in isolation when one is faced with a managerial problem. The politics and psychology of a problem situation must also be understood when designing interventions. Clemson recommends that, in order to use management cybernetics, interventions should meet several criteria.

1. The intervention should be **psychologically** acceptable to the stakeholders.
2. The intervention should be **politically** feasible given the existing stakeholders.
3. The intervention should be appropriate to the types of **technologies** employed within the organisation.
4. The intervention should also focus on the **systemic** characteristics within the organisation. This means that it should improve the cybernetics within the organisation i.e. the cybernetic laws must not be violated. These laws are given in appendix J and are used in the chapter covering the intervention undertaken during the course of this project as well as the evaluation given in the final chapter.

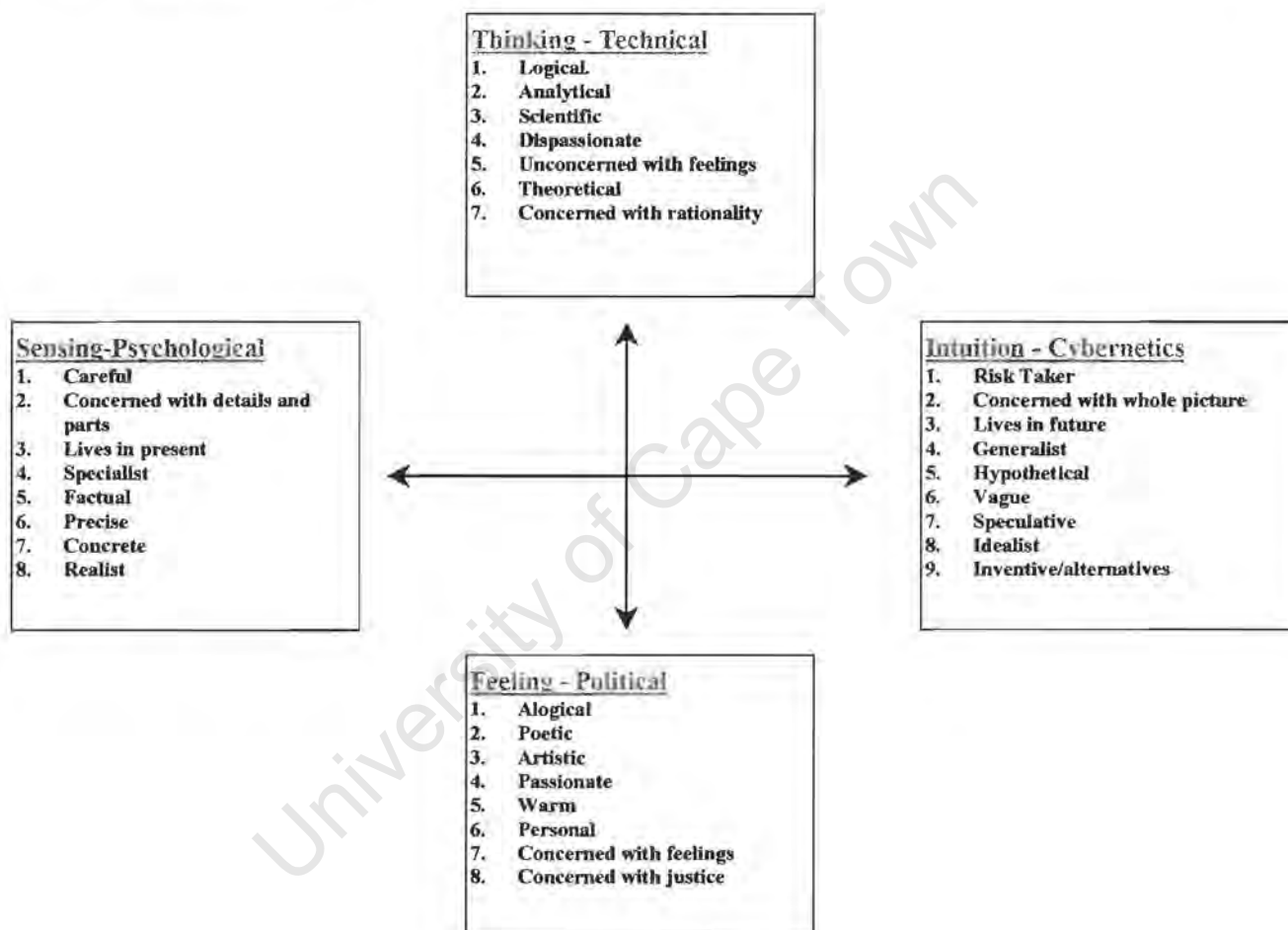
These four factors are related in various ways to the concepts of problem formulation discussed in the previous section. The relationship between Systems thinking and Problem formulation is shown in figure 5. Since Systems thinking involves recognition that the relationships between two entities are as important as the entities themselves, it is appropriate to discuss the relationships between the nodes of the model.



**Figure 5: Exploring the Relationships of the Triadic framework for Problem solving**

The psychology of the various stakeholders within the perceived problem situation must be explored prior to designing an intervention. Some of these psychological factors are shown in figure 6 [1]. Figure 6 is also known as the Jungian Dimensions after the famous psychoanalyst Carl Jung and his work in the area of human temperament and behaviour.

Each personality type is given a name e.g. thinking, sensing. The hyphenated section refers to the match with the cybernetic perspectives shown in figure 4. This means that a “thinker” type personality is closely related to the technical perspectives of problem solving, as perceived by Clemson[3]. It should be noted that most individuals will have differing degrees of the four dimensions, as personality traits and that an individual is limited to one trait particularly.



**Figure 6: Psychological Approach to Research - A Synthesis of The Jungian Dimensions [1] and a Cybernetic approach to managerial problem solving [3].**

Figure 6 illustrates that there are an enormous variety of personality types and that each type will view a particular problem through a different “lens”. These lenses need to be focussed onto one place in order to produce an effective problem statement. Clemson's problem solving approach has also been superimposed on the above diagram to illustrate the convergence in approach to problem solving.



The Jungian dimensions find application not only in assessing the psychology of those involved in a problem situation but also the relevant politics. The politics within organisations, particularly in unionised environments that most large organisations deal with, invariably has an impact on any planned intervention. Consultation and participation are important factors here and stakeholders must be correctly identified and involved. The psychology of those who hold the power within any situation will determine their sway over the situation. The Jungian dimensions provide a means of assessing the psychology of individuals. Hence understanding of individual psychology and its effect on the politics can lead to an improvements for both the problem formulation process and the implementation of any solution.

In the preceding section, I argued that problem formulation must be supplemented by systemic thinking when approaching managerial problems. These are two of the three nodes in my model for problem solving (figure 2). Systems thinking and, more particularly, Cybernetics provides a manager with more than just tools but it provides powerful methods of analysing and reducing the complexity and variety that are inherent in many problem situations. Systems thinking widens the perspectives on a problem and yields a more holistic view of the problem. In this way systems thinking complements the approach to problem formulation as advocated by Mitrov [1] - table 1 - and others. The causal approach inherent in systems thinking reveals the interplay between the various factors in a problem situation and allows one to view not only the isolated parts of the problem domain but, of equally importance, the relationship between these parts. In this way, the boundaries of a problem are expanded and alternatives can be explored in greater depth. Cybernetics allows a manager to organise effectively. This organisation can be applied to both the team that is facing a problem (e.g. are we as a team organised to face this problem? What are our rules and policies as a team? Is our implementation of a solution supported by a strong policy and strategy? etc) and to the problem itself (e.g. how are the various parts of this problem organised and related to one another? What controls are in place and policies regulate them?). Clemson [3] states that in using the Cybernetic approach "it is better to get the wrong answer to the right question than to get the right answer to the wrong questions". In formulating a problem definition many questions from many differing perspectives need to be asked and one should also leave room for the fact that the problem definition will evolve according to the route that the intervention follows and the reactions of the various stakeholders to the events as they unfold. This is an integral theme of the Qualitative research method, which constitutes the third node of the problem-solving model. The following section introduces the concept of Qualitative research and describes how this is related to the systems thinking and problem formulation nodes of the model shown in figure 2.

### 2.3. Qualitative Research

Qualitative research (QR) is the third and final node of the problem solving model shown in figure 2. QR examines the relationship between the knower and the known. This relationship is seen as interdependent. Meaning is central to qualitative research. Meaning is taken to be joint and multiple i.e. joint in that it arises from the relationships within a situation and multiple in that it can be understood from many different perspectives (see figure 6).

Assumption	Question	Quantitative	Qualitative
<b>Ontological</b>	What is the nature of reality?	Reality is objective and singular, apart from the researcher.	Reality is subjective and multiple as seen by the participants of the study.
<b>Epistemological</b>	What is the relationship of the researcher to that researched?	Researcher is independent from that being researched.	Researcher interacts with that being researched.
<b>Axiological</b>	What is the role of values?	Value-free and unbiased.	Value-laden and biased.
<b>Rhetorical</b>	What is the language of research?	Formal, based on set of definitions, impersonal voice, quantitative words.	Informal, evolving decisions, personal voice, accepted qualitative words.
<b>Methodological</b>	What is the process of research?	Deductive process. Cause and effect. Static design-categories isolated before study.	Inductive process. Mutual shaping of factors. Emergent design – categories identified during research process.
<b>Table 2: Philosophical approaches to Research [2].</b>			

Quantitative (or traditional) research is based on observations that are converted into discreet units that can be compared with other units by using mathematical methods. The focus of this research approach is primarily concerned with the explanation and prediction of observable events. Qualitative research (QR), on the other hand, examines people's words and actions in narrative or descriptive ways more closely representing the situation as experienced by the participants [2]. This makes QR a more amenable approach in the research of social and organisational phenomena. In this type of approach, the



meaning events have for those being studied is of greater importance. The type of questions that are asked at the outset determines whether the research is qualitative or quantitative in approach. The qualitative approach starts out by examining existing paradigms or worldviews of the stakeholders in a particular setting. What is the nature of reality? What role do values play in the overall picture? How does this fit in? How does the process of observing effect the observed? Here, paradigm is taken to mean a set of overarching and interconnected assumptions about the nature of reality. The qualitative researcher (QR) questions these assumptions and the meanings that these assumptions give to the context. The questions given in table 2 as well as those given in the problem formulation section (2.1.3) are typical in this regard. QR also attempts to establish patterns in the observable data. Pieces of a pattern that do not fit are of particular importance and this is elaborated on by Kuhn (the Nature of Scientific Revolutions). The recognition of patterns of behaviour is also a strong characteristic of systems thinking [4] and the process whereby a observation effects and is affected by that being observed are key features of Cybernetics [3]. Thus, QR complements systems thinking. The following section explores the QR approach in greater detail.

QR values context sensitivity, that is, an understanding of the phenomena in all its complexity and *within* a particular situation and environment. The traditional research method is orientated towards verifying what has already been discovered [2]. The QR approach departs from this method in that the orientation is towards the discovery of salient propositions i.e. pieces of a puzzle that pieces don't fit. *The question of why they do not fit is also of great importance.* The QR paradigm also departs from traditional research in its assumptions about the nature of change. In the traditional approach, piece of the puzzle are assembled one at a time, whereas in the QR approach, growth of a model is favoured (a process also known as morphogenesis). This means that meaning evolves from an understanding of the research topic. This is also known as emergent research design. In this approach, data collection and analysis are simultaneous and ongoing activities that allow for important understandings to emerge or be discovered along the way. These understandings would be for both the researcher and the other subjects of the research study. These new understandings can then be pursued in additional data collection exercises. In emergent design, not all the specifics of the study can be outlined in advance. Rather, important leads that are identified in the early stages of the research project can be pursued by asking new questions and observing new situations within a richer context. All the while the researcher needs to be aware that the process of observing and interacting is having an effect on the subject matter and visa versa.

Qualitative research has sometimes been called naturalistic research because the natural setting is the place where the researcher is most likely to discover what is to be known about the phenomenon of interest. This is in contrast to the traditional research method where much time is focussed on isolating variables and reducing environmental effects. Qualitative research attempts to understand and observe systems, particularly social systems, in their natural environment and thus gives cognisance to the effect that the environment has on the object of study. This is elaborated on in the section below – Indwelling.

### **2.3.1 The QR approach – Indwelling.**

The nature of QR, as described above, requires a unique approach on the part of the researcher. Qualitative researchers tend to view the traditional (quantitative) research techniques of, say a scientific research project, as cold, distant and separated, where the researcher attempts to be as objective as possible. This approach, QR's ([2]) argue, may be appropriate for inanimate objects but does not bode well for research into social systems. Hence, QR is characterised by a different approach to the research and an attitude on the part of the researcher which is best described as indwelling. This means to

exist as an interactive spirit [2]. Introspection and meditation on the subject (to live within) become important. By understanding the impact that the research topic has on the researcher, and visa versa, the process of understanding meaning and interpretations can be better understood. QR, when used in the social systems arena, also requires an understanding of the difference between tacit and explicit knowledge. Tacit knowledge is unarticulated. Explicit knowledge is that which is stated and/or written down. This can also be understood from the point of view of theories in use versus espoused theories. Theories in use are those which an individual can be observed to be following whereas espoused theories are those which the individual mentally holds (and may state, under duress....), but does not fully act upon. QR attempts to reveal tacit knowledge, which is seen as the beginning of all knowledge by many Qualitative researchers. Explicit knowledge starts off as tacit knowledge, and the QR process attempts to conscientise this tacit knowledge and hence explain its effect upon the actions of individuals and the social system within which they interact. The connection of intentions, beliefs, values and expectations of various actors in a situation thus becomes important in conducting research in a qualitative manner. Thus, interaction and the observation thereof, from many different angles within the social system, are the main characteristics of the QR method. Interaction requires that the researcher becomes as involved as possible with the subject matter and this is known as immersion.

QR involves immersion in the culture of the subject of study. Sheer human togetherness is another way of understanding the posture of indwelling [2]. The QR must seek to understand the world of other by experiencing that world in a way that the other is experiencing it, literally to place oneself in the shoes of another, and if possible also to walk the mile in these shoes. This also requires that the web of meaning that others have about the world becomes more fully understood by the researcher. Here it becomes important to reveal the "meaning making" activities of the actors in a given situation. In order to reach this type of understanding, indwelling requires skilled questioning techniques as well as exceptional listening habits. Russell Ackoff (quoted in [3]) states that it is more important to get the wrong answer to the right question than to get the right answer to the wrong question. The task of finding the right question is part of the emergent design feature of the QR process. Often the type and quality of answer given depends on the quality of the question that is being asked. Hence, in order to obtain the most meaningful answers a lot of attention should be paid to the framing of research questions.

The researcher should also be conscious attempts to get the answers they want but should rather to explore the meaning of answers that have been accurately recorded. Qualitative research examines people's words and actions in narrative or descriptive ways more closely representing the situation as experienced by the participants. Qualitative researchers develop a general focus of inquiry that helps to guide the discovery of what is to be known about some social phenomenon [1]. The nature of QR is one of discovering patterns in the data; the data in this case is derived from people's words and actions. In order to conduct this type of research, methods of capturing words and behaviour need to be examined. Data collection consists primarily of observation, interviewing and document analysis. Here, a broad approach is required and various types of methods can be deployed for example, an interview can be of the traditional one on one type, a group interview can be used or the informal type of interview in the form of a casual conversation. Two factors that are important at this stage of the QR process are: interpretation and context. QR requires that the researcher records results accurately and this means not interpreting the results at the same time that the results are being collected. Put another way one should try to see what is there and not what one would like to be there. The process of interviewing means that one should listen hard and record what is said accurately. This also has a bearing on the context of the situation. It is important to recognize that the answers to interview questions are given within a particular context (for the interviewee and interviewer). This context has a direct bearing on the type of answers given and hence the research results. The structure of interviews is also important.

Cyberneticians note that it is more important to get the wrong answer to the right question than to

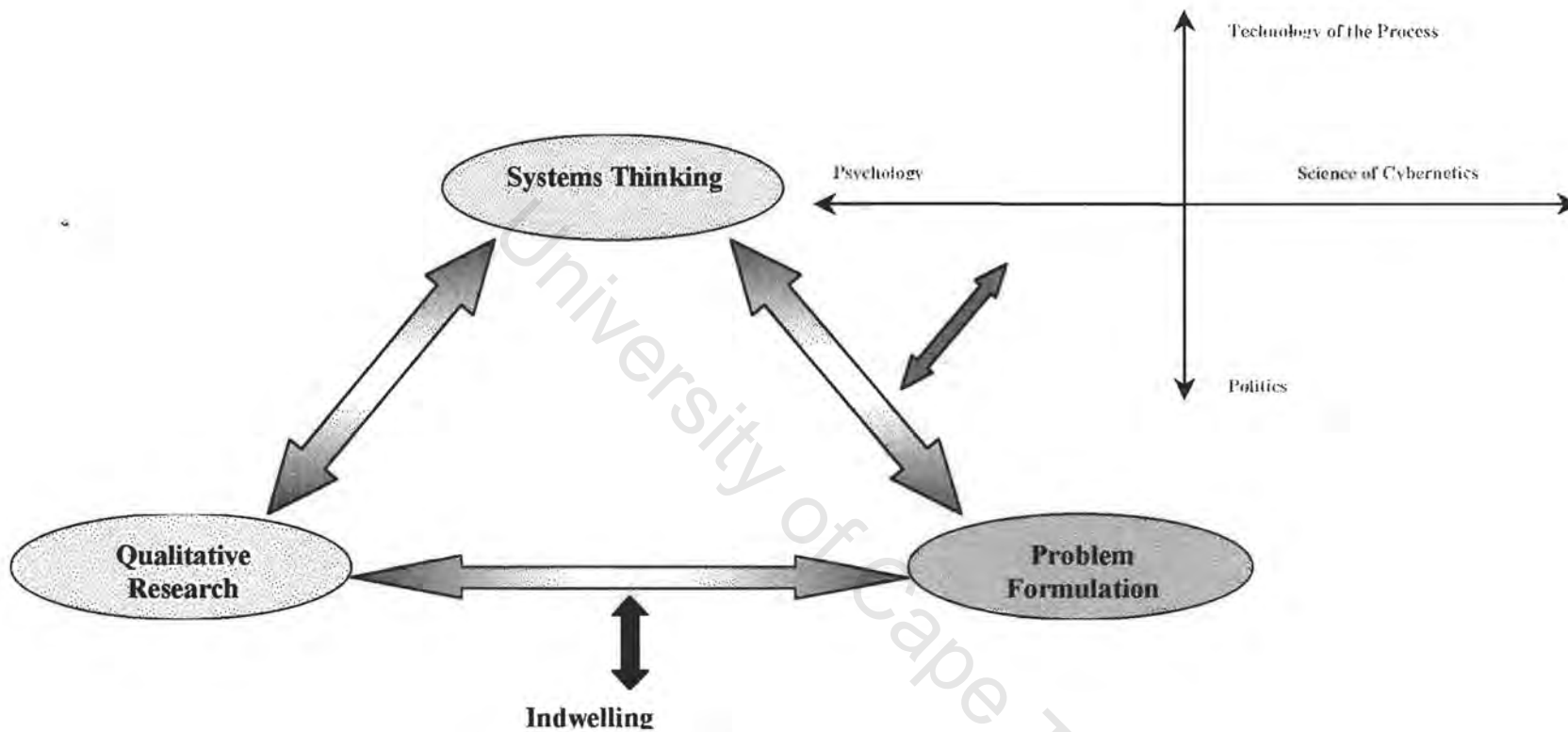
get the right answer to the wrong question. The type of questions asked should follow this general guideline. This means that in examining words and behaviour it is important also to examine the underlying paradigms and questions, which probe the paradigms, are required. The paradigm also effects and is affected by the context of the interview and this evolving type of relationship will have an impact on the results obtained. The QR must be aware of this emergent feature of the process.

In summary, QR can be thought of as reading of a situation. It requires meditative reflectance upon the subject of the study and an understanding that the observer and the observed are interconnected in many ways. The process of reflectance seeks to reveal the nature of the situation and also that of the researcher. The process of inquiry is interactive and iterative in that the researcher must go back and forth between observation and interpretation. During this cyclical process, meaning evolves. The process requires that the observer get as close as possible to the subject in order to accurately reflect on meaning. In social systems research, this requires not only getting into someone else's shoes, but trying to walk the mile in those shoes. There is a strong correlation between QR and the previous topics of this chapter, namely, systems thinking and problem formulation. This correlation is evident when comparing for example the philosophical approaches, as outlined by the questions posed in tables 2, and the relationship between QR and the other two nodes of the problem solving model (figure 2) are explored below.

### **2.3.2. The relationship between Problem Formulation and QR**

My model for managerial problem solving is shown on the following page. The main nodes of Systems Thinking, QR and Problem Formulation are shown as well as the main factors that relate these topics to one another, as discussed thus far. Indwelling is seen as the primary factor in the relationship between Problem Formulation and QR. The QR approach requires an understanding of the differences between tacit and explicit knowledge. Indwelling, combined with interviewing, is the main method for uncovering these differences. This understanding is integral to Problem Formulation; where assumptions (tacit knowledge) are uncovered and questioned with a view to improving the problem definition, before designing solutions. QR also requires an immersion in the culture of the study. This implies that the politics, psychology, systemics and technical aspects of the situation must well understood by those that are forming a problem definition. QR focuses strongly on the language used by the role players in the research topic. It is important to uncover the meaning (both explicit and implicit) that phrases have for those who use them. This complements problem formulation where the phrasing of a problem, and the language that is used to describe a problem (nuclear "weapons" or nuclear "devices"), has a significant impact on the solutions that are derived. Indwelling is the primary method used to understand the language and meanings of those involved in the research topic.

The indwelling approach is necessarily reflective in nature and this reflective process is an integral part of action research. The process of making meaning in a QR project requires reflection on the subject at hand. This approach to research is also an integral part of what has become known as Action research, which is discussed in the next section.

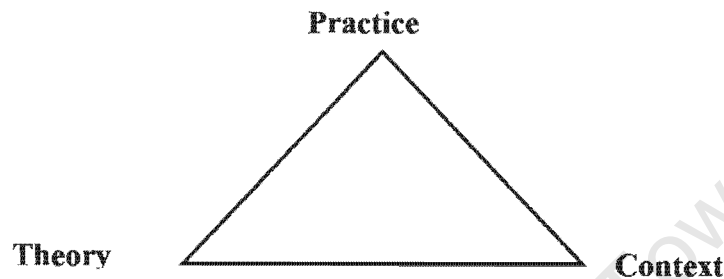


**Figure 7: Exploring the Relationships between Problem Formulation and QR**

### **2.3.2. Conducting QR in an Action Research framework**

In the previous section, I argued that the Qualitative research paradigm is an ideal choice conducting research into social systems or human systems. QR focuses mainly on language and meanings and is reflective in nature. The cyclical process of acting and reflecting are the basis for action research, which is described in this section.

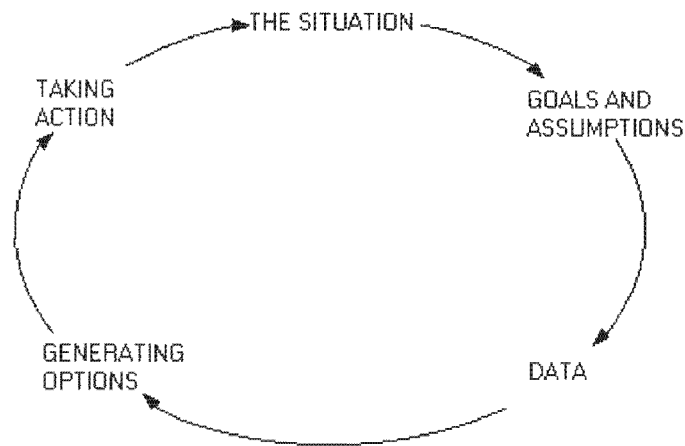
Action research projects are geared towards solving organisational issues. Conventional or scientific research develops the researcher's skill and knowledge, but often leaves the organisation untouched. Action research is geared towards achieving improvement in three aspects namely the theory, the context or situation within which the theory is applied (or generated). This is illustrated below.



**Figure 8: Action Research**

The theory referred to above is taken to be management theory in this report. The outcome of the research project should yield improvements in the management theory for myself. This improvement in theory then acts as the basis for an improvement in management practice and also an improvement in the situation i.e. for both the researcher and the subjects of the research project. Integral to this approach is the claim by pragmatists such as W Edwards Deming that knowledge can only be claimed if results are shown.

Action research requires that one becomes integrally involved in the research topic. The purpose of action research is not to define the body of knowledge but, rather, to extract the appropriate knowledge and apply it to an existing issue [8]. It is research by doing as illustrated in the following diagram.



**Figure 9: The Action Research Cycle**

In the previous diagram action research is depicted as a cyclical process and each phase of the cycle is discussed below.

- **The Situation.** This refers to the context within which the research project takes place. The goal of the project is to achieve an improvement in the situation by designing an intervention. The intervention is designed after an initial research phase into the project but, because the emergent design philosophy of QR is used, it is not necessary that this situation be clearly defined upfront. Rather, QR when conducted in an action research framework allows for the focus of the research project to change as new data emerges.
- **Goals and Assumptions.** The researcher must uncover the assumptions held by all involved in the situation, including him/herself. This is accomplished primarily by interview/questioning techniques. The assumptions form a major part of the research project in that they are seen as the drivers for action. The set of assumptions held by any individual in a research study are collectively known as paradigms and this was discussed earlier in this section. It is important to understand that paradigms need to be investigated as part of a qualitative research process because this type of research focuses on the words and meanings of the actors in the situation. *The emergent design approach of QR means that there is no problem definition stage but rather an ongoing problem formulation process.* This is reinforced by the fact that the research process is cyclical and hence allows for the problem to be reframed and thus evolve, as more data come to light.
- **Data.** Data can be collected by, for example, the use of questionnaires, interviews and observations. In collecting data, care must be taken to ensure that the right questions are asked not only for the sake of expediency but also to get to the heart of the matter. Field notes and tape recordings can be used for this purpose. A logbook is also important for the researcher because it assists in the developmental process. This is linked to the indwelling posture of QR in that it affords the researcher the opportunity to reflect on the

context and thus to develop insight. The data phase also refers to literature surveys. Care must be taken to ensure that all types of literature are read and not just the literature that which the researcher presumes will be relevant, especially during initial stages. This is similar to an investigative type approach where the initial literature may point the way to more important topics, which are closer to the heart of the matter. Here, emphasis should be on openness when investigating i.e. leaving oneself open to alternatives.

- **Generating Options.** At this stage the intervention is designed. Various options must be generated and the best one selected. There are various techniques available here such as brainstorming, fishbone diagrams, inter-relation diagrams etc.
- **Taking action.** The core of action research is to take action and then reflect on the results of the action. In this stage, an intervention is designed. The intervention should not be designed to achieve a certain set of results but rather it should be left as open-ended as possible. In designing an intervention there are many opportunities to obtain good design by involving those who are the subject of the study. This will in turn affect the quality of the results. People who are left out of this stage may be reluctant to participate fully and this will have a detrimental affect on the outcome of the project. Action research is much more involved with the situation rather than being detached from it. It is an issue centred approach.
- **Once action has been taken,** the situation is affected by these actions and the researcher is taken back to the start of the cycle. The situation is now altered by the intervention and this will impact on further results. The cyclical process shows this in that the situation always affects the assumptions and goals. The emergent design philosophy of QR allows for the next intervention to be redesigned along these lines i.e. new assumptions will be formed or old assumptions will be re-enforced and the researcher must be aware of this effect. The cyclical process also recognises that a situation will evolve, as will the assumptions held by those that are affected by the changing situation. The QR technique stresses that the researcher must be aware of these changing assumptions and, as far as possible, try to uncover them.

The researcher is part of the experiment and therefore includes him/herself as a variable to be acknowledged and to some extent tested. The involvement of the researcher is an intrinsic part of the research and not to be ignored. The researcher as a variable is accounted for and managed. This is a crucial insight of both QR and Cybernetics.

Action research involves interactive learning through evaluating experiences. Action research then, is simply a process of observing, reflecting, hypothesizing and acting

It is a process that involves:

**Attacking problems/opportunities.** The opportunities that are presented to the QR come in various forms and the informal interview (commonly known as a conversation) is an opportunity to conduct research. Asking the right questions from the conditions of risks, lack of knowledge and total confusion. The QR must be aware that the quality of the questions will affect not only the immediate results, but also results that will be gleaned from future interviews.

**Implementing the answers and experimenting.** Some answers will work and some will not work. Implementation is part of the basic learning cycle that is an integral part of action research. The process of indwelling that QR requires mean getting ones hands dirty and is an attempt on behalf of the



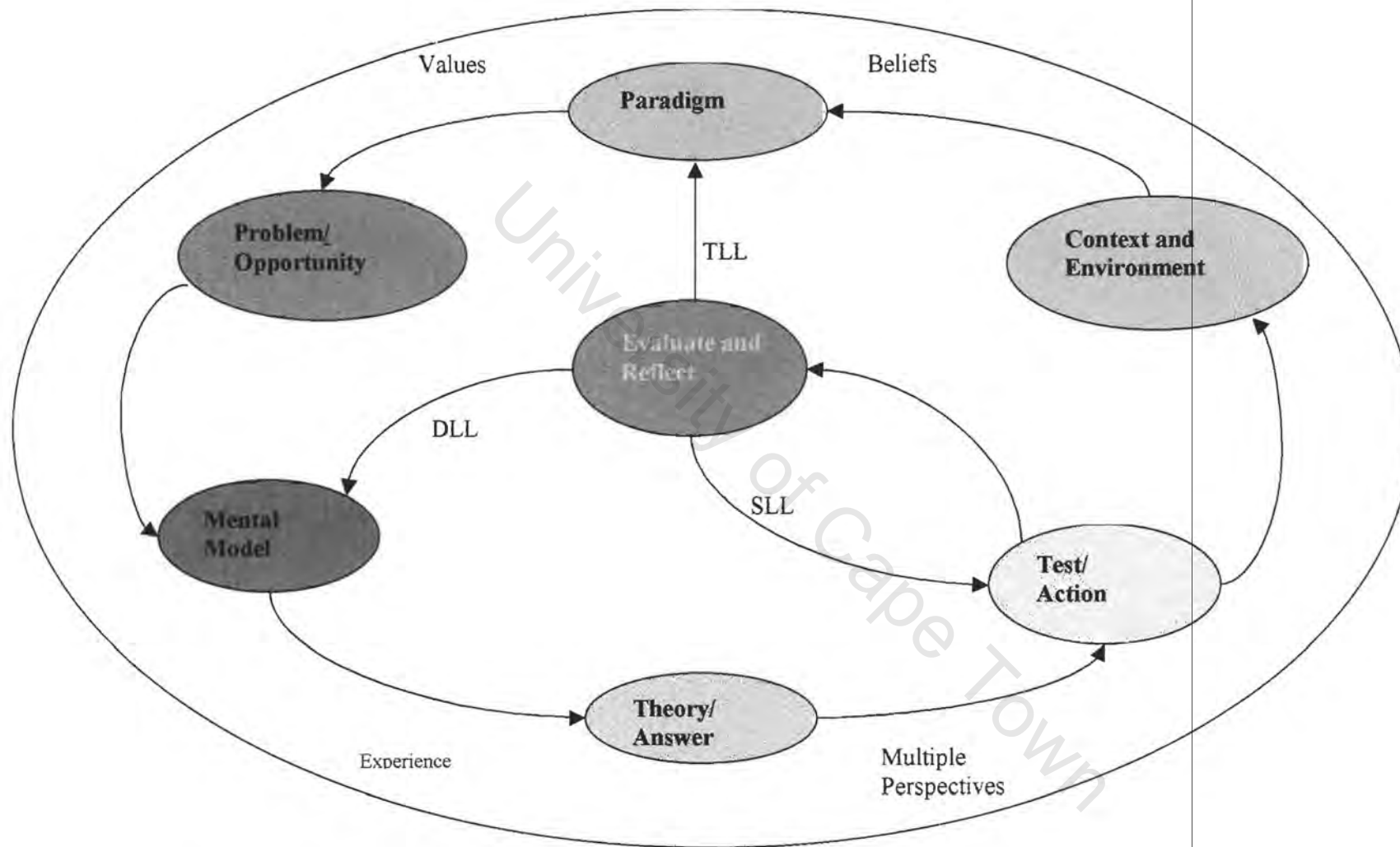
interviewer to "feel" the process for him/her self.

In conducting QR, action research methodology has an impact in that the researcher is not just observer but is part of the system being observed. The mere process of observation means becoming part of the system. This allows cybernetic techniques to be used in the research project, as described in section 2.2.1. The QR approach of Indwelling is required in order to understand people's responses in context. Although it may seem obvious that the process of observation affects the outcome, the QR must be aware of the effect that this has on the results (or reported results) that the research topic will yield. The cyclical research process, as outlined in figure 9 above, is similar to the emergent design process of QR. As the research project proceeds, new knowledge is uncovered and this knowledge contributes to the project but must also be evaluated within the expanding context. In a previous report, the Author and others [46] developed a model based on Action research and Systems Thinking. The model forms the basis of my approach to Systemic management and I use it in the QR process. Hence it is an important linkage between QR and Systems Thinking because it is based on Action Research and also brings essential elements of systems thinking into the equation. A brief description of the model is given and then I argue that this model contributes to a definition of the relationship between QR and Systems Thinking i.e. two of the nodes of the model shown in figure 2.

#### **2.4. A Systemic Management Model**

The model shown below is a simplified tool designed not only for solving problems and grabbing opportunities but also how to manage effectively. The model represents a way of thinking and acting and was developed by myself and other OMDP students in a previous project [46]. The model is based on the principles of action research. The process of evaluation and reflection is central to the model and thus the model is also learning tool. The causal nature of the model is typical of a systemic approach to problem solving. In this case, the problem is problem solving itself. The model is shown in figure 10 and a description of the model is then provided.





**Figure 10: A systemic management model based on action research [46]**

In most situations, the Single Loop Learning (SLL) process is sufficient, as shown by the inner loop between Reflections and Action in figure 10. The SLL process involves evaluating *Actions*. The standard quality control procedure is typical in this regard. *Evaluation* requires measurement. In this model the gap between desired and actual results is measured. If the gap between desired and actual results becomes unacceptably high, the model requires that the Double Loop Learning (DLL) route be taken. For DLL, the model requires that underlying *Mental Models* be evaluated.

*Mental Models* are “maps” which people hold in their memory. The model could be a picture, a formula or a one-line phrase, for example: -

*I do not want to be right, I only want to know whether I am right – Albert Einstein*

Or

*I hear, I forget,  
I see, I remember,  
I do, I understand - Chinese Proverb*

A typical question asked at the *Mental Model* node in the model is: How can I do this differently so that it will become easier? Using one's mental model will produce an *Answer*, which must then be *tested*.

As the *Testing* is taking place, *Actions* impact on the *Environment* and the *Evaluation*. Thus the observer is part of the system being observed (see also section 2.2.1 - Cybernetics).

*Environment is the larger surroundings, circumstances and influences forming the context. In this project, the working environment within which the skills development intervention is taking place, was considered.* The influences of the environment impact on every node in the model. One has to continuously monitor the environment to check the effects of actions taken. Graphs (e.g. behavior over time etc, see also [4]), representing patterns of behavior help to explain and understand the environment. If, after one has evaluated a *mental model*, taken *action* and *evaluated* the results, and the problems persist, then the model recommends that Paradigms be re-evaluated.

A *Paradigm* is a window or filter for perceiving and screening data. The window is formed by a set of beliefs, values, principles, morals and guidelines that are adopted by an individual. The foundations upon which a *mental model* is built, and hence more conceptual than *mental models*. A Paradigm can be thought of as “glasses for looking” at the world or “water to the fish”. These glasses (i.e. Spectacles) act as filters. Filtering takes place when one selects (subconsciously and consciously) from observable data, only what is relevant to one's situation. Based on the data filtered through, the *Problem / Opportunity* (as shown in fig. 10) statement is defined. When the gap between desired and actual results persists, the model recommends that *Paradigms* be consciously evaluated. The existing paradigm is used in solving the problem as long as it does that successfully. However, there is a stage where “paradigm paralysis” can occur. As problems become harder and harder it reaches a stage where the existing paradigm fails to solve problems. Paradigm shift needs to take place, resulting in the formation of a new set of rules. Triple Loop learning (TLL) occurs in the paradigm shift process. Formation of new set of rules is a giant step and involves views from other people. The concept of multiple perspectives is applied and

consensus reached on changes to be made, the effects of such changes on people and how best to implement such changes.

The new paradigm helps to re-define the problem. Thus, it is not possible to achieve a situation where there are no problems as each paradigm comes with its own set of (interrelated) problems and opportunities. This proposition was explained in a previous section (Mess Management) and can often lead to a situation known as paradigm paralysis. Here, over-analysis of the situation results in no action taking place. The systemic management model caters for this by allowing problems to be viewed also as opportunities and by making action learning and research an integral feature of the systemic model.

My approach to Action Research is based Systems Thinking, as described above, in the form of a model. Systems thinking requires that one examine not only the parts of a system but the interrelation between these parts and using this approach I have chosen to define the relationship between the three primary elements of the model for managerial problem solving, as shown in figure 2. The other relationships have been described in previous sections and the final relationship between Systems Thinking and QR is described below. This relationship essentially comprises the systemic management model shown in figure 10.

## **2.5 The Relationship between Systems Thinking and Qualitative Research (QR).**

Systems thinking requires that every part be viewed in terms of a greater whole. This approach could be termed holistic and requires that relationships, particularly causal ones, be examined. Holism and causality are the main themes of Cybernetics. Cybernetics has been defined as the art and science of effective organisation [3]. Cybernetics is concerned with the general patterns, laws and principles of behaviour that characterise complex systems. In this context a systems can be dynamic, open, and probabilistic. Cybernetics asks not "what a thing is?" but rather "what does it do?" Cybernetics deals with behavioural patterns in so far as they are regular or determinate or reproducible [3]. QR looks to understanding a situation as it is constructed by the participants. The cybernetic approach requires an understanding that the observer can never divorce himself/herself from the situation but by the mere process of observing, becomes part of the situation. The task of the QR is then to capture the process of interpretation that the various actors in a situation are undertaking. Here the use of the words subjective and objective also becomes important. The cybernetic approach recognizes that true objectivity is, in many cases, impossible (stemming from Heisenberg's uncertainty theorem). Cybernetic techniques require an understanding that a researcher, as observer, influences his/her own reality.

A researcher using the cybernetic approach should give attention to:

- Choosing the set of variables that define a system under study and
- The basic premises and beliefs, held by all involved (especially the researcher) about the way the system operates.

QR requires an understanding of the patterns in data. Cybernetics provides the techniques with which to uncover and validate or refute these patterns.

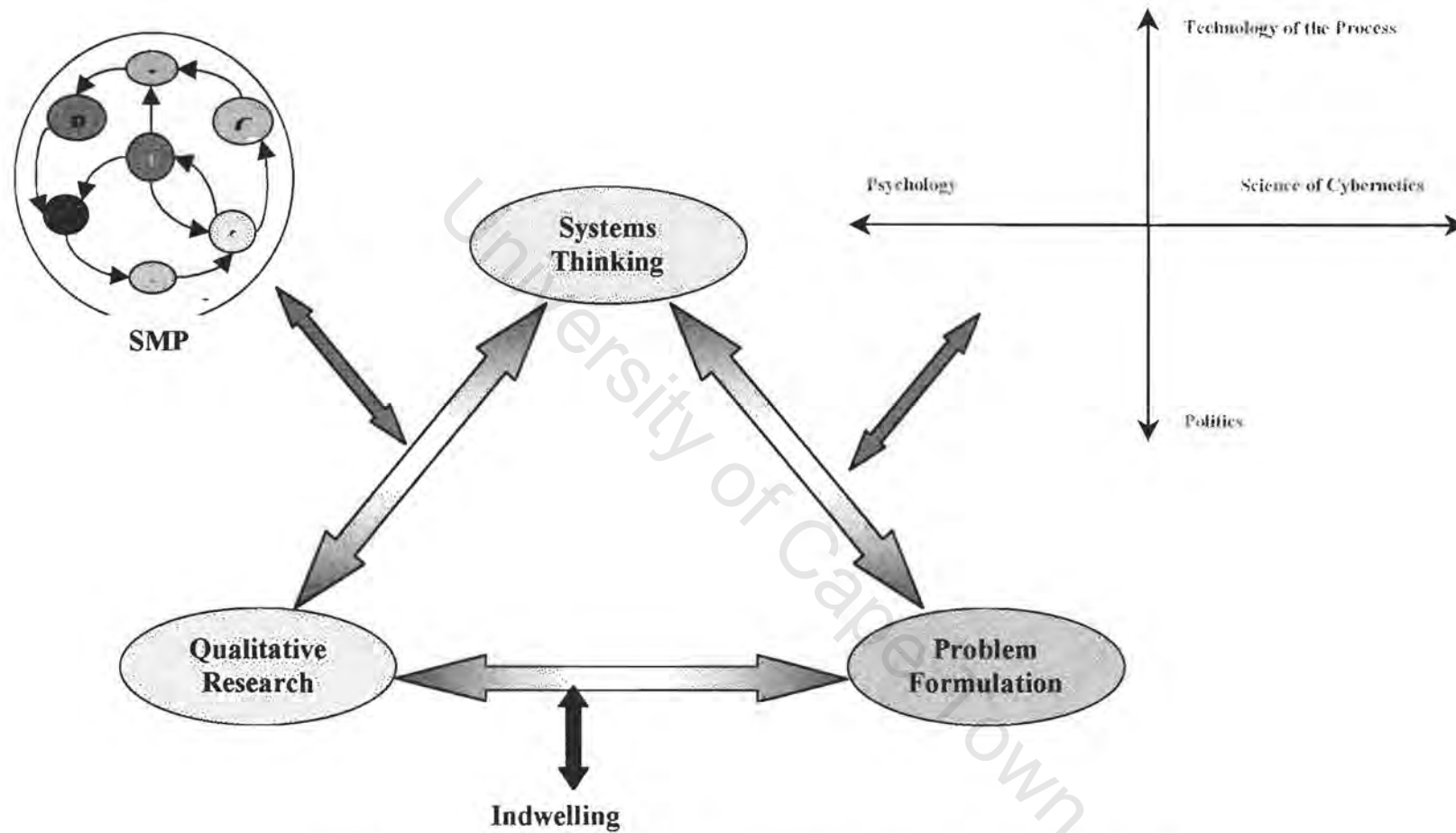
With the above in mind, the model for problem solving can be redrawn to show that the systemic management model, as shown in figure 10, describes (for the author), the relationship between Systems

Thinking and QR. This model will be applied and evaluated as part of this research project.

## **2.6 Summary**

In this chapter I have presented my model for managerial problem solving. The model is a synthesis of various theoretical concepts as shown in figure 11. The core of the model comprises three separate but interrelated parts, namely, Problem Formulation, Systems Thinking and Qualitative Research. Each of these components has been described in this chapter. In the spirit of Systems Thinking, I have also described my view of the relationship between the parts of the model. These relationships have been described in this chapter and are also summarized in figure 11. The model is my answer to the broad area of concern for the project - problem solving. Action research will be used in the next stage of model development - testing and refinement. In implementing the model, it is important to recognize that change will take place and hence change needs to be contextualised as part of the model.

Implicit in every part of the picture presented in figure 11 is change. Change is part of problem formulation, in that, as understanding evolves, the problem statement changes. Change is integral to the learning loop that underpins action research (figure 9) and the cyclical SMP model discussed above in that learning involves a change in the meaning perspectives of the learner, particularly when confronted with intellectual challenges such as paradigm shifts. Finally, systems thinking provides some of the most effective methods for the management of variety, which is in part change management. Indeed, change is part of the essence of the Model presented on the following page and this forms the theme of the next chapter which describes my approach to Change Management.



**Figure 11: Relationships revisited - Managerial Problem Solving Model**

### **3. Change Management**

In the previous chapter I described a proposed model for Managerial problem solving. The model has three components, namely Problem Formulation, Systems Thinking and Qualitative Research. In the spirit of Systems thinking, I also elaborated on the relationships between the components and this is shown in figure 11 on the previous page. In conducting any project, one is confronted with or one causes change to occur. Change occurs when Action Research is taking place, when Systems thinking is used to analyse/synthesize, when an interview is conducted using QR, when a problem is being defined using Problem Formulation etc. In the course of a research project, change occurs and this change must be managed if acceptable results are to be achieved. Change cannot be ascribed to any particular part of the model and occurs whether the whole model is used in the course of a project or if only one part of the model is used e.g. Cybernetics. Hence, in using the model, one needs to be aware of change and how and when to manage it. Change is part of the essence of the Problem Solving Model (Figure 11) and the following section describes my approach to change management.

#### **3.1. The Case for Change.**

In the past decade, the World has been changing at a faster rate than at any time since the Second World War. Particularly since the end of the Cold War, walls have been coming down, new trading blocks forming, democracies emerging, trade barriers falling and the World has awoken to the potentials of an Information Age. Businesses are undergoing enormous changes in an effort to supply customers who are demanding ever-greater value. With lifetime employment no longer assured, people are seeking training, employability and continuous learning. Change seems to have joined death and taxes as one of life's certainties. With the enormous amount of change taking place, there is also a plethora of management fads, as discussed in the previous chapter. A major concern here is that change for changes' sake can often be detrimental to progress and profitability.

Companies, as any management consultant will tell you, live in an era of incessant change. But some are clearly better at changing than others. Few Organisational change efforts tend to be complete failures, but few tend to be entirely successful. It has been reported that 70 percent of the big change efforts in corporations in the United States have failed [49]. Most efforts encounter problems, they take longer than expected or desired, they sometimes kill morale, and they cost a great deal in terms of managerial time or emotional upheaval.

Two new surveys suggest some reasons. One finds that only one in five change management projects succeed. The other shows that companies, which are bad at change, are far more likely to use outside consultants to handle it than those that are good at change.

A recent study by UK based consultancy A.T Kearney [52] asked senior executives in 294 medium and large European companies to rate their change programs. The outcome of the research indicated that only 20% considered recent changes in their company as successful. 63 % had made changes but the changes were unsustainable and 17% indicated that there was no improvement at all was brought about by the changes. In the same study, 90% of the respondents said that cost reductions were the primary goal of the change. A far smaller percentage (27%) gave increasing revenue as an important objective of

change. AT Kearney's research also indicate that two-thirds of re-engineering projects seem to fail, and, in Britain, less than half of all "Total Quality Management" programmes show appreciable results.

The second survey, conducted by Atticus, a British consultancy, claims that companies that are "able" to change, show striking differences from those that are "inept" [52]. Atticus approached 3000 companies around the World asking them to measure their ability to change and 400 replied. The results showed that, for companies in the top 5%, top managers were more than twice as likely to be involved in change projects as they were in the bottom 10%. The top 5% were also three times as likely as the bottom 10% to have proactive policies on communication of change. Another striking difference between top and bottom scorers was in the use of consultants. Asked to say whether "change management" was embedded as a functional capability, 80% of the top scorers said yes as opposed to 20% in those companies ranked at the bottom of the survey table. AT Kearney's research indicates that companies that are good at change are more likely to use consultants in a more sophisticated way rather than to merely supplant managers. The largest gap between companies that were good and bad at change arose because some learnt from change and built it into their culture and performance assessment [52].

Do we have an option but to prepare for change? Could the knowledge of when and how to change be a competitive advantage? What is an effective way to handle change within an organisation? How can management predict whether change efforts will be sustainable in the long term? The following section gives a brief description of the major changes and trends that are now confronting every organisation. Thereafter I discuss different approaches to Change Management and finally I outline my approach to this topic.

### **3.2. Environmental Transitions-Characteristics of the 21<sup>st</sup> Century.**

Throughout the world, there is a growing realisation that many of the concepts that have served as standard practices in the past will no longer be effective in meeting the challenges of the 21<sup>st</sup> century.

*We sense that the changes surrounding us are not mere trends but the workings of large, unruly forces: the globalisation of markets, the spread of information technology and computer networks; the dismantling of hierarchy, the structure that has essentially organised work since the mid-19<sup>th</sup> century. Growing up around these is a new information-age economy, whose fundamental sources of wealth are knowledge and communication rather than natural resources and physical labour. [13]*

So what are these large unruly forces alluded to here?

#### **Realignment of Global Markets**

The economic landscape of the world and organisations is clearly under reconstruction. Enormous trading blocks are forming the world over. The GATT (General Agreement on Tariffs and Trade) and its successor, the World Trade Organisation (WTO) has reduced tariffs and trade barriers while providing a mechanism for dispute resolution (apart from the commonly recognised "men in black" from Atlanta, Sydney and Genoa). National borders are becoming less sacrosanct and numerous trading blocks have emerged. Some of the more notable entities are the European Union (EU), North American Free Trade Agreement (NAFTA) and the Southern Common Market (MERCOSUR). World bodies, trading blocs, governments and regulatory agencies are creating/responding to open market initiatives.



Legislated monopolies, protected firms, and national entities are being privatised and exposed to a new wave of competition from many new and/or non-traditional sources.

### **The Transition from a Seller's to a Buyer's market.**

A subtle but significant change induced by the global competition of free markets has been the transition from seller's markets to buyer's markets [4]. A seller's market is a supply driven market where what can be produced will be sold, whereas a buyer's market is a demand driven market where it is no longer true that whatever can be produced will be sold. Table 3 differentiates the market types based on order qualifiers and order winners.

	Order Qualifier	Order Winner
<b>Seller's Market</b>	Price	Quality
<b>Buyer's Market</b>	Price and Quality	Responsiveness

**Table 3: Transition from a Seller's to a Buyer's market. [15]**

Table 3 shows that, in the transition from a Seller's to a Buyer's market, quality is no longer an order winner but is reduced to the level of order qualifier. Responsiveness, a customer service dimension, becomes the order winner and the fulcrum for competitive advantage. Responsiveness is frequently an internal flexibility dimension that is related to cycle time. This flexibility will be seen later to be a crucial ingredient of successful change.

### **Customer Centric Focus.**

In a buyer's market, a customer-centric orientation is of critical importance. The concept of a customer has been extended to include internal customers (internal referring to the inside of an organisation) as well as emerging concepts such as internal markets where business units within a company begin to compete within market conditions. Good service is about fulfilling more than basic customer expectations. Service/responsiveness is something extra in the customer's perception of value. Service is subjective and frequently hard to measure but it is very real to the customer. It is about building a relationship based on terms such as trust, honesty, faith, reputation and loyalty. Relationships with customers, both internal and external, become a critical differentiation between mediocre and successful organisations.

### **Technology**

New technologies, emerging almost on a daily basis, are being implemented to increase efficiency, productivity, speed of responsiveness and consumer power. Twenty years ago, there were 50,000 computers worldwide. By 2000, that many were being installed daily [15]. Current predictions by South African Cellular Phone service providers are that there will be 20 million subscribers by 2005 (there were about 3 million in November 2000). Organisations that do not embrace the new technologies in their business processes run the risk of losing competitive advantage.

## **Complexity and Paradox.**

All of the above factors contribute to the complex nature of the current business climate. This is reflected in the eruption of paradoxes that confront us (see also 2.1.4). In organisational life, a paradox that often confronts one is that situations and problems that cry out most strongly for change are often the very ones that resist change most stubbornly. The conflicting choices or conditions that are the essence of paradox make most people uncomfortable. The perceived need to choose between seemingly bipolar opposites creates tension. A common way to handle the unpleasant state is to “fix” one of the apparent contradictions. This stems from a paradigm that sees the world as “either/or”. In the emerging information age, the “either/or” mentality (mechanistic) is being challenged by an attempt to reconcile the ambiguity inherent in paradox with “both/and” thinking. Traditional approaches to change management are being questioned and this is discussed in the next section.

### **3.3. Approaches to Change Management**

In many organisations, people believe they need to start with a plan for change. This plan is charted according to certain general organisational policies and, the plan must continually be referred to in order to complete the change. An analogy is drawn below between change management and navigation.

*The European navigator begins with a plan- a course-, which he has charted according to certain universal principles, and he carries out his voyage by relating his every move to that plan. His effort throughout his voyage is directed to remaining on course. If unexpected events occur, he must first alter the plan and then respond accordingly. The Trukese navigator begins with an objective rather than a plan. He sets off towards the objective and responds to conditions as they arise in ad hoc fashion. He utilises information provided by the wind, the waves, the tide and current, the fauna, the stars, the clouds, the sound of the water on the sides of the boat, and he steers accordingly. His effort is directed to doing whatever is necessary to reach the objective. Berreman [25]*

Recent research by Hoffman[17] suggests that change more closely resembles the voyage of the Trukese rather than that of the European Navigator. In this model, broad plans are developed which allow for flexibility within the overall objectives. People end up responding to conditions as they arise, often in an *ad hoc* fashion, doing whatever is necessary to implement the change - a good analogy to this would be what is known in the world of jazz music as *improvisation*.

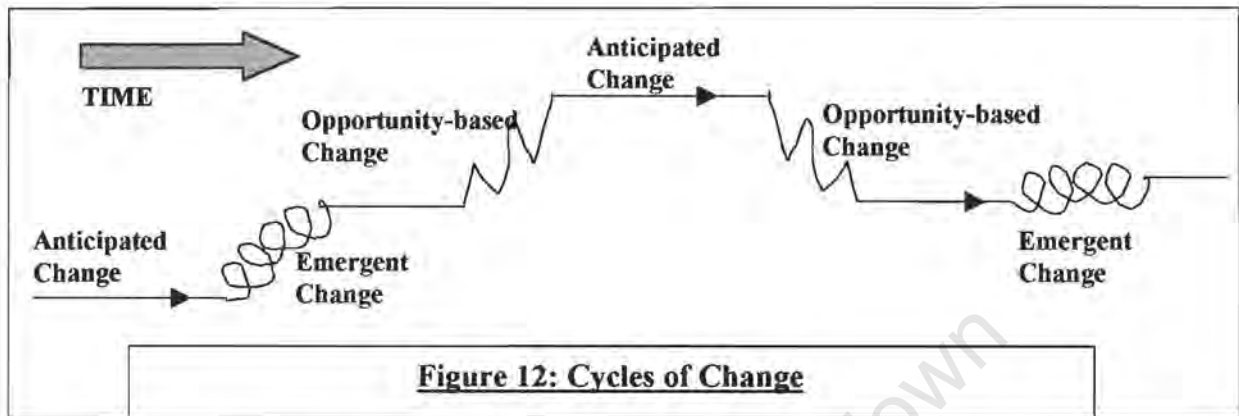
Traditional ways of thinking about change have their roots in a three-stage model [17] of “unfreezing”, “change” and “refreezing”. According to this model, the organisation prepares for change, implements the change, and then strives to regain stability as soon as possible. Such a model treats change as an event to be managed during a specified period. Such models are appropriate for organisations and environments that are relatively stable and bounded and whose functionality is sufficiently fixed to allow for detailed specification. Today, however, given the amount of turbulence, complexity and uncertainty that many organisations are facing (as outlined in the previous section) this approach to change becomes ineffective and a model that sees change as an ongoing improvisation is emerging.

Hoffman [17] has identified three main types of types of change (mainly adapted from Mintzberg)

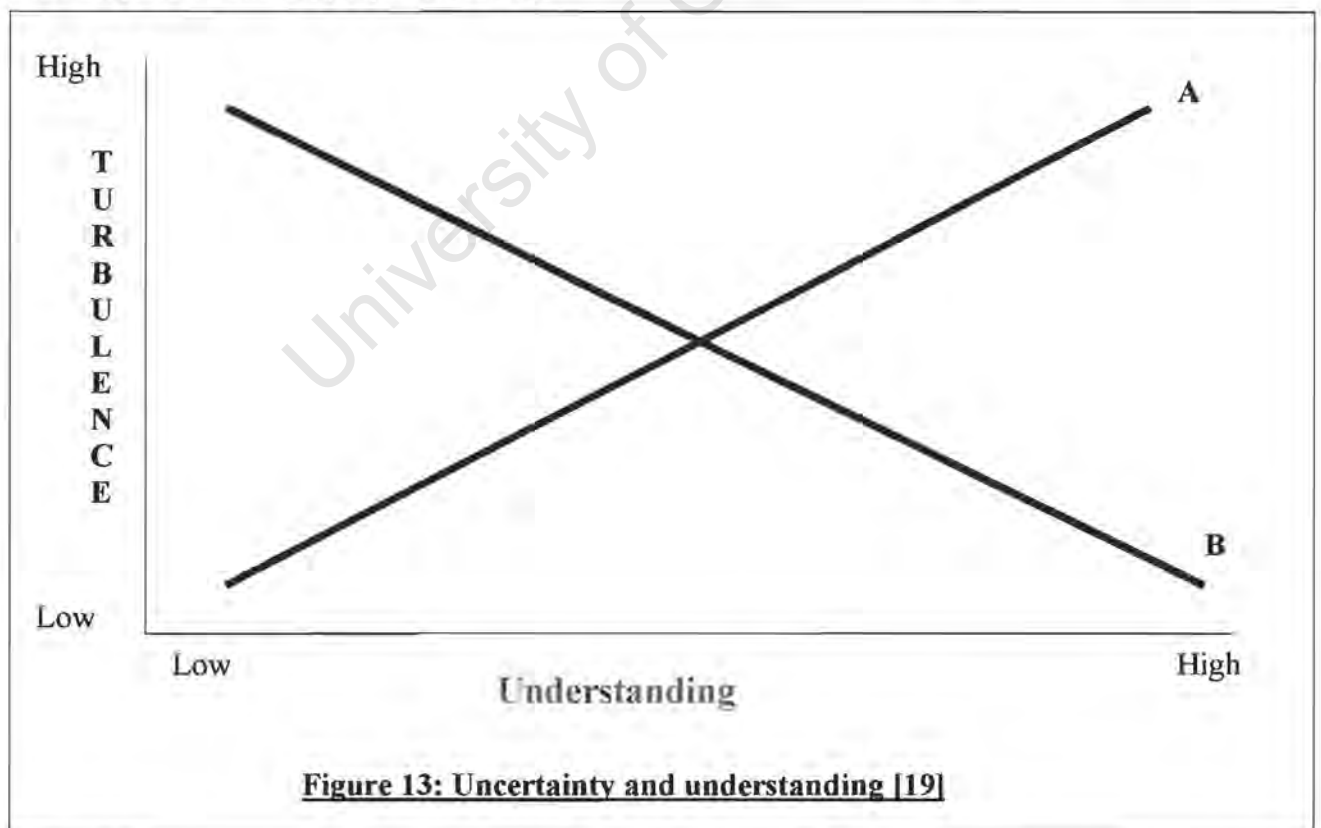
- Anticipated – changes that are planned ahead of time. Easily predictable based on an extension of current processes or technology.

- Emergent – changes that arise spontaneously from innovation and are not originally intended or anticipated.
- Opportunity Based – changes that are not anticipated ahead of time but are introduced purposefully and intentionally during the change process in response to unexpected opportunities that arise as part of the change process...improvisation.

These types of change are compared in the following diagram.



The following diagram shows the relationship between environmental change and the understanding. Understanding, in this context, refers to the capacity of an organisation to extract useful information from the environmental noise, in a timely fashion. In effect, the measure of understanding is also a measure of the capacity of the organisation to reduce the environmental variety and then to respond to that variety in the most appropriate fashion.



The traditional organisational response to turbulence has been either to steer clear of it as far as possible or to try to tame it by moving organisational processes downward along line B towards greater calm and greater understanding. The traditional “unfreezing”, “change” and “refreezing” change model referred to above, is applicable in the lower regions of figure 13, where turbulence is low. The organisation has time to reach an improved understanding of the turbulence, to consider the impact of any change and access alternative plans. In the upper reaches of the diagram, turbulence becomes a major concern. For many organisations, changes under these conditions represent a whole new ball game, not only because they haven’t played the game before, but because most of the rules are in a state of flux. Comfort zones alter rapidly. Responsiveness becomes a major concern for survival.

Boiset [19] has identified two reasons why organisations habitually (as he put’s it) prefer travelling downward along line B rather than upward along line A. The first is that turbulence is major source of discomfort. The patterns that emerge during periods of high turbulence are hard to identify, let alone communicate. This in turn leads on to the second source of discomfort namely, conflict. Organisations faced with threats must prepare for conflict, not only with competitors but also internal conflict that arises. Internal conflict arises because individuals align themselves with different possible outcomes. Consensus becomes harder to achieve and this presents the organisation with a further threat... paralysis leading to eventual death. Here, turbulence is referred to as change and can either be externally initiated, in the case of a revolutionary new product, or internally initiated, for example opening a new factory. Interestingly, some companies such as Hewlett-Packard have policies which initiate change internally based on a philosophy of “killing off its own products with new technology” [49]. The scale of change in today’s business environment is compared in figure 14. The turbulence vs. understanding axes from figure 13 has been included in this picture in order to compare the relative levels of change and understanding. Moving from left to right, the type of change is shown from human problems (where there is generally a difficult or low understanding i.e. complexity, politics etc) to the more technical problems, which are often very well understood. The level of turbulence is shown in the vertical axes as increasing from moderate change to severe change. Severe change is associated with an environment where there is much turbulence.

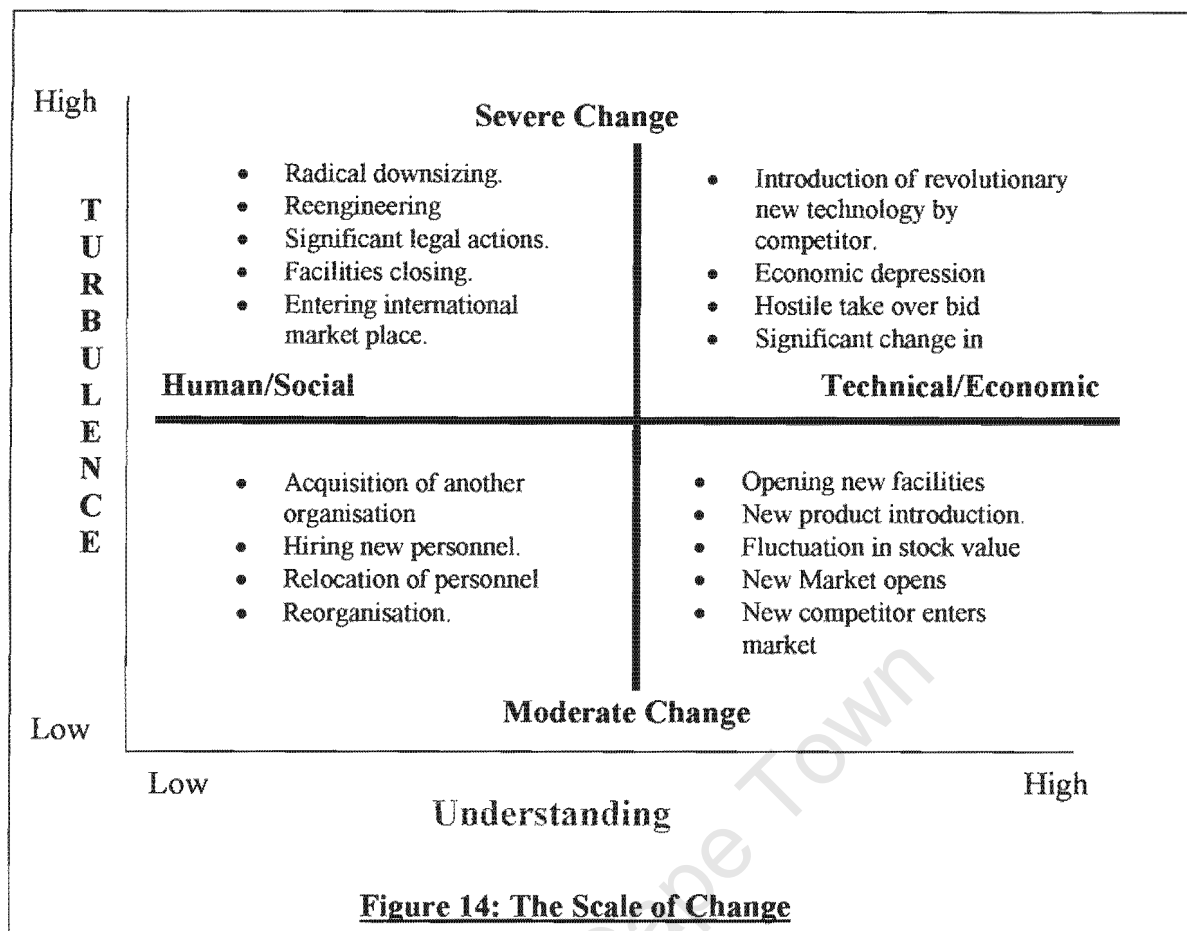


Figure 14 also shows the basic parameters of the scale of change and can give an insight into what can be anticipated when accessing potential pitfalls. In the preceding discussion, the enormous effects of changes now taking place in the world were outlined. Various types of changes were also compared, in broad categories. In order for an organisation to remain viable into the future, it must recognise and adapt to these changes, in effect it should foster *change readiness*. This readiness applies not only to individuals but also to the organisation as a whole. The scale of change diagram shown above is a means of accessing the scope of change and hence the degree to which an organisation needs to foster this readiness for change. From the above discussion, it is also apparent that different types of changes will require differing approaches to change management. A readiness for change requires an awareness of the type of change and also an awareness of possible responses/reactions to the change. The next section deals with potential pitfalls that will confront those charged with managing change.

### 3.4. The Pitfalls of Change

A transitional state can create many challenges and opportunities but there are also certain pitfalls that a manager needs to be aware of. These are identified and discussed below.

#### Burnout

Transitional periods cause much stress for those involved. The stress is caused by the rate and magnitude of the change and varies according to individual personalities. Managers need to be aware that changes will bring about stress for themselves and also for those whom they manage. This is

particularly evident in downsizing exercises where the performance of a company is expected to improve with reduced staff. Recent evidence [15] shows that downsizing has a dramatic effect on those who are left behind.

The effectiveness of this type of change can be seriously hampered due to burnout of personnel who survived the downsizing and are now “expected to do more with less”. This also has implications for morale.

#### Brain Drain.

A paradox of modern organisational life is that, as times get more difficult, one of the first areas to be cut is training and development. The paradox in this situation lies in the fact that certain problems that lie at the root of the difficult times, required expertise and managerial skill. These skills may not be readily available and, since training has been cut, it is unlikely that they will become available except through the use of consultants. The less qualified the managers, the less likely they will contribute to the successful transition of the company into the new competitive posture.

Major transitions also lead to the onset of a survivor’s mentality of “why me?” or “am I next?”. The level of commitment and loyalty is strained due to the uncertainty created by current or recently instituted changes. A common reaction to this is for managers to access alternatives to their current position. Indeed, it would be a logical proposition for managers in such situations to increase the stability in their careers by changing them.

#### Diversions

Most of the intrinsic value of a company comes from intangible assets, i.e. corporate culture, quality of workforce, loyalty, relationships, brand awareness etc. These are the things that are typically neglected during organisational transitions, Tersine [15] asserts. O'Brien [49] argues that if management wants to shift its strategies and alter its course, it must consider the underlying values and beliefs that have been keeping the ship afloat. These values and beliefs are integral to the culture of an organisation. The real value of a company and its products is tied to the ability to outperform others in the market place. This edge is built on the synergy between tangible and intangible assets. Organisational changes that are aimed at cost cutting (such as downsizing) run the risk of diverting attention away from the above-mentioned factors i.e. a reduction in support for non-tangible assets. A corporate culture of ‘looking over your shoulder’ and ‘lying low for a while’ is not conducive to building a viable and successful organisation. Core competencies require continually nurturing and building[27]. Just as intangible assets need attention, so does the building and maintaining of core competencies. The attention that change management requires can often serve as a distraction from the competency building process. If management is not willing or able to devote time, capital and personnel to their core competencies, the long run consequences can be the eroding of these competencies and a reduction in competitive advantage.

#### Accelerated Outsourcing.

Outsourcing is often viewed as a strategy to address downsizing. One of the potential negative consequences of outsourcing is that the company may outsource core business processes or knowledge, which then place increased threats on the business. This can compromise the companies’ competitive advantage particularly if the outsourcing process is not well managed.



### Ignoring the Future.

The intensity of change can sometime lead to a “here and now” focus within organisations. The support of long-term projects, research, training, new product development, public relations and relationship building may be curtailed to reduce expenses in the short run. Traditionally, these factors do not offer immediate return but build future product differentiation, which is essential for viability and competitive advantage. This is also a paradox of modern management in that investors want returns now but if the focus on expenses is too strong, future or potential profits are compromised.

The main pitfalls to change and factors that divert attention during a transition have been discussed above. Managers facing the challenge of change need to be aware of these factors, if transition is to be viable and successful. This covers only one facet of change readiness that was covered in section 3.4. Change readiness also requires preparation of the individual manager and the organisation as a whole.

### **3.6. Preparing for Change and Resistance to Change.**

Resistance always accompanies organisational change efforts. The most likely response to a change proposal is a series of outraged objections, some reasonable and some irrelevant. The most likely results are: nothing happens; if the proposer has sufficient persuasiveness, there is cosmetic change but the underlying situation remains unaltered or soon reverts to what it was before; if the proposer has sufficient power, change is pushed through but at the cost of conflict, resentment and reduced motivation and morale which results in the classic worse before better situation referred to by Senge (section 2.1). This can also lead to the situation where the negative consequences of the change outweigh the intended positive spin-offs of the change. Research undertaken by Maurer [26] indicated that between 50 and 66% of all major corporate change efforts fail and *resistance is the little recognised but critically important* contributor to that failure.

Since, ‘the beginning of wisdom is the definition of terms’ (Socrates), it is important to define resistance before discussing it. Resistance, in an organisational setting, is an expression of reservation, which normally arises as a response or reaction to change. Management normally witnesses this expression as any employee actions that attempt to stop, delay or alter the intended consequences of the change. Resistance is often linked with negative employee attitudes or with counter-productive behaviour. On organisational grounds, resistance to change can be understood when it is realised that from the behavioural point of view [16], organisations are coalitions of interest groups in tension. Management vs. Union, Production vs. Sales, Accounting vs. R and D Union A vs. Union B Head Office vs. Local Site etc. The resultant organisation is a particular balance of forces, which has been resolved over a period of time. A real change proposal, that has the possibility of changing this balance, is likely to encounter resistance. When psychological resistance from rigid people under threat compounds this, it is not surprising that managing change is difficult and often avoided by managers. Kotter [12] observes that surprisingly few take the time before an organisational change to assess stakeholder perspectives i.e. who might resist the change and why. Managers often just apply a simple set of beliefs such as “engineers are always conservative so it’s to be expected that they resist change”. A simplistic belief, or a paradox, when one understands that initiating improvements (in systems or products) through change (design) is integral to many engineering jobs. A myriad of such beliefs (not necessarily applicable to engineers) exist and are commonly expressed as:



- You can't teach an old dog new tricks (e.g. older people in the company resisting change)
- Let sleeping dogs lie.
- Getting rid of deadwood (common excuse to restructure or retrench)

The danger in such paradigms is that apart from being excuses for lack of managerial insight and ability, they often insult stakeholders, further compounding the obstacles in the change process. Sohal argues that the four most common reasons why people resist change are:

1. Rational Factors: these occur when employees assess a proposal and foresee a different outcome from that expressed or envisaged by management. Such differences tend to reduce the confidence of the employees in management, if they are not appropriately addressed. Management may also be egocentric in this regard and tend to pass off employee suggestions or insights. Sohal [14] asserts that this will increase resistance to change. Managers who initiate change often assume that they have all the relevant information required to make the decisions required in the change process and believe that they will be perceived as incompetent if they do not have all the answers (these assumptions should to be tested).
2. Irrational Factors: the reaction of an individual worker to a proposed change is also a function of predispositions and preferences, which are not necessarily based on an economic assessment of the change [14]. These may include instances of resistance by people who do not wish to move offices or implement a new technology because of uncertainty. Change always involves uncertainty and, on this basis, the change will be resisted until the uncertainty is clarified. This, to a large extent depends on the level of trust between management and workers. If this level of trust is not high, misunderstandings easily develops when change is proposed
3. Political factors: favouritism, back biting and point scoring against those that are initiating the change may also lead to resistance. In these cases individuals focus on their own self-interest and not on those of the total organisation.
4. Management Factors: inappropriate or poor management styles of those initiating the change effort also contribute to a lack of confidence in the ability of management and thus lead to further resistance to change.

Management Guru Peter Drucker (quoted in [17]) has argued that the major obstacle to organisational growth is manager's inability to change their attitudes and behaviour as rapidly *as their organisations* require. Managers cannot expect to change without undergoing the change themselves. Managers involved in change should expect that they themselves will in all likely hood have to change first, if only a change of heart, and that this must occur if successful change is to be implemented on a wider scale. Hence, a major element in change management is ***management capacity i.e. the capacity that a manager has for change and the management thereof, within and without.*** One aspect of this capacity is the ability of managers to change and adapt themselves and to ***foster an internal readiness for change,*** on a personal basis and for those whom they lead through the change.

The above factors show that resistance to change is a complex factor that can make or break a transition. A particularly interesting belief in change management, as observed by Sohal [14], is that a change process that occurs with minimal resistance must have been a good change that was managed well. This assumption, he argues, is somewhat naïve and *believes a common perspective that casts resistance in a negative light.* Managers often view resistance as the enemy of change; a foe, which must be overcome if a change effort, if it is to be successful. An emerging trend in change management is one that

challenges this perspective, one that views certain aspects of resistance to change as offering particular advantages.

### **3.7. The Utility of Resistance**

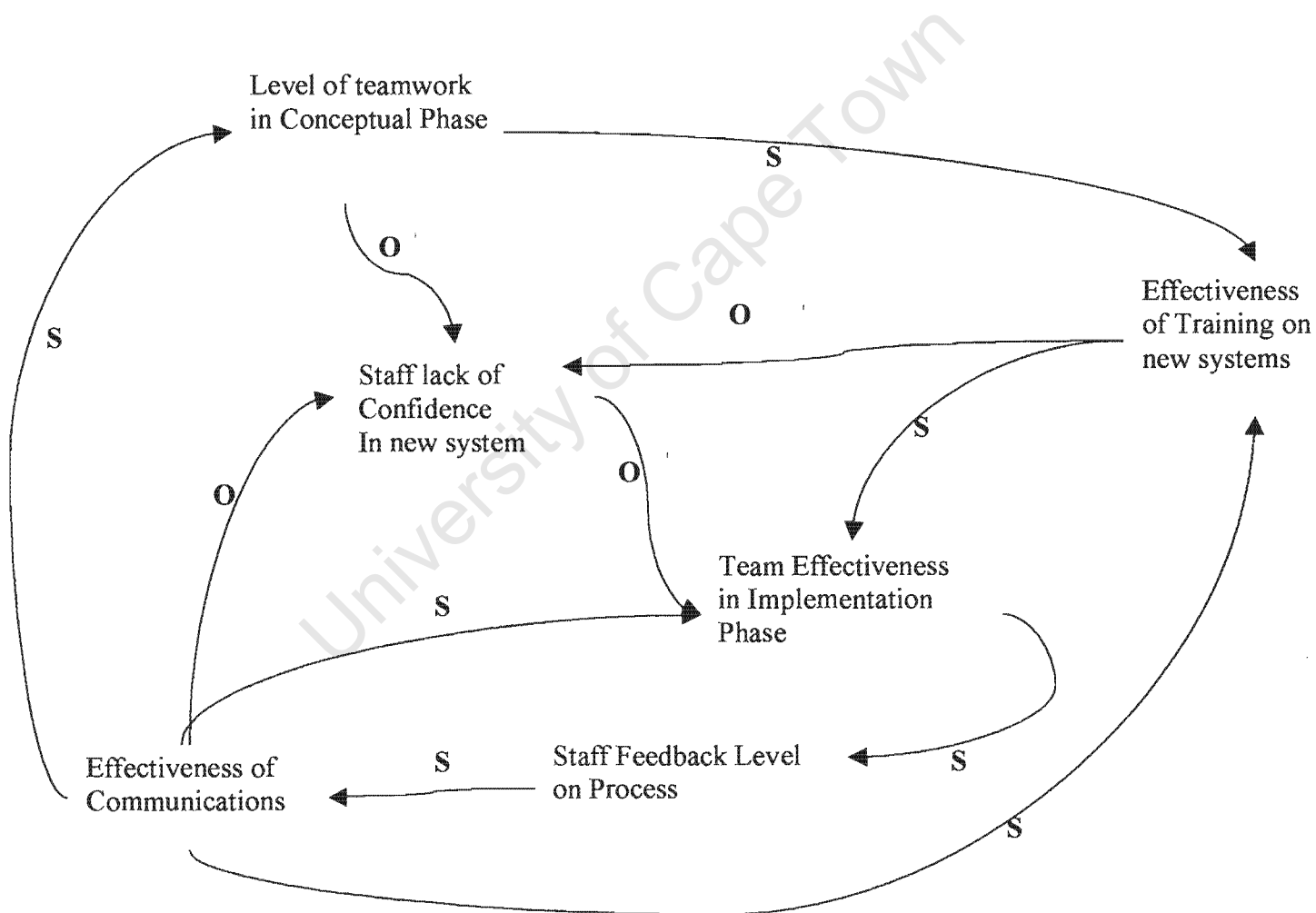
According to Sohal [14], a great deal of work undertaken during the 1960s and 70's found that there is in fact a utility to be gained from resistance, therefore it should not be avoided or quashed as suggested by classical management theory. In the early 1930s, Winston Churchill predicted that the inability of the Nazi's to tolerate criticism would lead to their downfall. Any dissenter was either murdered or expelled. He equated this with the bodily reaction of pain by saying that although pain is not nice it is very necessary for normal bodily functioning as it is the primary indicator of dysfunction. Once the dysfunction has been identified (starting with the pain), corrective action can then be initiated. Pain is thus a necessary form of resistance to the current situation. Pain killers treat the symptoms and not the causes. In the workplace, when the word resistance is mentioned, managers tend to ascribe negative connotations to it. This, Sohal asserts, is a misconception because there are many times when resistance is the most effective response available and is a *natural* response. A variety of authors have even suggested that there are a number of advantages of resistance, from a managerial viewpoint, and these are mentioned below:

1. Resistance points out that it is a fallacy to consider change as inherently good and necessary for growth. Change for the sake of change must encounter resistance if it is to be halted before damage is done. To this end, resistance plays a crucial role in influencing the organisation towards greater stability. While pressure from external and internal environments continues to encourage change, resistance is a factor that can balance these demands against the need for constancy and stability.
2. Resistance plays a crucial role in drawing multiple perspectives together and in drawing attention to the aspects of a change that may be inappropriate.
3. Resistance to change acts as a crucial warning signal (like pain) of certain potentially negative outcomes of an intervention.
4. Resistance also contributes to the change process by bringing an influx of energy into the process. This energy can be harnessed to search for alternatives or to mould future changes or opportunities. Under such circumstances, resistance can become a crucial source of innovation. Authors, such as Senge[4], refer to this as creative tension.
5. Lastly, resistance is what keeps us from attaching ourselves to every craze, idea or fad that comes along. The legislative process in a democratic system, for example, is predicated upon resistance playing a crucial role in ensuring the best possible laws are produced.

The above guidelines provide points of leverage for the constructive use of resistance to change. The overwhelming suggestion in management literature [14] is that participative techniques are the best method of handling resistance. The argument is that a carefully managed process of two-way communication, information sharing and consultation leads to increased commitment from employees in the change process. The word participative is often used to describe an approach to management and it is necessary to elaborate on this further.

### 3.8. Participation or Co-determination

Participation is a very lucid term in most managerial texts. Often it is no more than a manager telling employees what he/she is about to do. Management has already drawn up all the plans and communication is merely a formality. This method is as sure to build up negative resistance as much as the case where there is no communication at all [14]. Management is perceived as arrogant and uncompromising and resistance to change is immediate. I have conducted research in this area and the following model for participation was developed in an Engineering projects environment. The model was constructed after two projects were not well received by the work force. Implementation was easy but hand over took a long time as those charged with using the new equipment went out of their way to find reasons not to use the new equipment. This situation was analysed by conducting extensive interviews with the various stakeholders and the following model for participation was produced. The model is explained in detail in a previous OMDP report [53] and a brief description of the model is provided below. The essence of the model is that effective communication and stakeholder participation, **right from the outset** of a project i.e. the conceptual phase, is critical for implementation, not only of the current project but of any future project involving and of the stakeholders (or those they influence).



**Figure 15: A Model for Continuous Improvement (CI Model)**

Referring to the model shown above, “S” (Same) means the relationship is reinforcing e.g. If “staff feedback level increases”, “Effectiveness of communications” increases. “O” (Opposite) is a balancing relationship e.g. if the “level of teamwork in the conceptual phases” decreases, the “staff lack of confidence in the new systems” increases. The model shows that effective communication is **essential in all phases** of a project. “Effective teamwork in the conceptual phase” has the effect of increasing the “effectiveness of training” which would then increase the “effectiveness of implementation of improvements”. (See appendix M for a practical example of the Model)

The effect of the feedback loops in the CI Model also indicate the relationship of service levels to customers needs as:

*If you don't adjust your service levels to that required by the customer, the system will do it for you - Peter Senge [4]*

Other key insights of the model are:

- Open communication is a key to both successful teamwork and continuous improvement.
- **The process is a result.** The process (i.e. the change process) is a result in itself, a result of how previous processes were handled. Correct handling of a project will yield results beyond the scope of the project. Confidence increases and the implementation of future projects will be made easier.

Here, participation starts at the conceptual phase of the project i.e. management, workers and other stakeholders are brought in from the very start of a project in order to plan the project. The basic reasoning behind this style of participation is that **people very rarely resist their own ideas**. This goes beyond selling ideas to workers or manipulative attempts at “making them think it’s their idea”. Rather, correct involvement of the stakeholders from the beginning of the process, lead in a transparent manner, can negate much resistance and enhance synergy, teamwork and mutual understanding.

The previous sections of this chapter outlined the changes occurring in the current business climate, type of change, approaches to change management and pitfalls in the process of change. My approach to change management is based on a synthesis of these concepts and is the conclusion of this chapter.

### **3.9. My Approach to Change Management.**

As organisations progress into the new millennium, the luxury of having the time to analyse the environment and to develop new strategies will be radically altered. Constant change, I argue, will become a common denominator. Some observers even proclaim that “the only constant is change”. The ability of management to navigate transitions and champion transformation processes will become a hallmark of the successful organisations. Change will become the essence of organisations.....a core competence. In order to develop this competence, Tersine et al [15] recommend the following options, and these, together with a synthesis of the current trends in change management, elaborated on above, form the basis of my approach to the changes that I was confronted with during the course of this project. These options are based upon recognising transitions (whether internal or external) in the business environment and developing effective measures to control the changes and take advantage of opportunities that are recognised.

**Awareness.** Managers need to be fully aware of environmental factors that could bring about change. This awareness starts with the methods used to assemble and filter information about the operational

environment. Frequently, managers have the tendency to omit or simplify the data in order to manage the overload situation. This can lead to misconceptions by employees about the change process leading to increased uncertainty and resistance and decreased trust. Thus, the information that management gathers systems need to be finely tuned in order to apply the most effective response to change or initiation of change. The basic parameter of data suggested by Tersine [15] is historic vs. future, qualitative vs. quantitative and internal vs. external. The tendency to “hunker down” or “stay low for a while” can become an operating style during transitional periods. As previously mentioned, this tendency hardly equips managers for future change initiatives.

**Role Specification.** The probability of accomplishing the changes required during transition is heightened if authority to perform is clearly defined for individuals and teams. The ability to effectively respond to continuous change can be optimised when four categories of decisions are determined. 1) Domain consensus and role specification for managers - agreement on these issues will clarify roles and reduce the tendency for managers to avoid preparing for decision-making and actually make decisions and implement. 2) Network definitions and integration - how data will be collected, analysed and disseminated particularly during the period of rapid change. 3) Communication – not only must the communication line be clearly demarcated but effective for the dissemination of information but feedback is of crucial importance. 4) Autonomy-decision making roles must be clearly defined and the groups that have vested authority must be clearly laid out.

**Magnitude of Change.** Although with certain types of changes, it is not possible to determine or control the magnitude of change, management must always be aware of this dimension. In the case of continuous improvement type changes which are initiated internally, control of the problem rests internally and managers must not ‘bet more than they can lose’ i.e. not only the level of change must be understood but also the rate of change. (See also figure 14).

**Communication.** Communication is often mentioned as the key to successful change. Issues such as the normativeness of communications, feedback, security, confidentiality, etc must be defined as clearly as possible for change to be successful and sustainable.

Manning [22] argues that change is implicit in strategic management. Planning, power and process are intertwined and problems arise when separation of these facets is attempted. There are four steps to managing change effectively:

1. **Create dissatisfaction with the status quo.**

This creates dissonance within the organisation and sense that change is required. People will not let go and do things differently, or do different things, without compelling rational and emotional reasons to do so. This is evidenced in phrases such as “don’t redesign the wheel” etc. This expresses a satisfaction with the status quo and will be accompanied by resistance to change unless a need for change is created. Involving employees in scanning the environment is usually a good place to start.

2. **Debate Possible Futures**

This gets people talking about the future. Collaboration builds teams and shared visions and buy-in becomes automatic. “People always believe their own data”. It become their purpose and their mission, it is not required to sell a vision to them as they have in effect sold it to themselves. At the heart of this and the previous point is the approach to communication and awareness mentioned above.

*Managing the corporate conversation is the strategist's most important responsibility. Nothing else matters as much. And fundamental to that task is the use of language – of words, phrases, concepts, metaphors, emphasis. The 26 letters of the alphabet can be combined in many ways. How you use them determines how well you do in the market place.* Manning [22].

Examples of this abound such as Bill Gates vision of 'A computer on every desk and in every home' or Steve Jobs 'insanely great products'. These phrases capture imagination, guide people and focus their actions. Philosopher Ludwig Wittgenstein once remarked that 'people don't have conversations, conversations have people'. These phrases comprise what is known as the system meta-language in systems thinking. The behavior of any organisation is a direct result of its conversations. Conversations that take place in the boardroom, on the shop floor, in the offices, in the corridors, in the canteen etc. The strategic conversations are continually taking place. Who says what, and how, to whom, is the cause of every action and the most potent influence on the company's culture. Manning argues that 'organisations become what they talk about' and the fact remains that the most important issues and the ones that have the most effect on the future for an organisation are the ones that get talked about, and measure, and thus managed.

3. **Act** (not only for results but also to Learn)

When people do, they learn. When they act, they discover what is possible and what they are capable of. Action and practice also lead to confidence.

4. **Reflection and Reviewal.** This ends the classic learning cycle as shown in figure 9 (see Action Research section). Reflection is a critical part of the learning process. Reflection creates dissatisfaction with the status quo and thus the cycle fuels itself as shown below.

### **Resistance Management**

Researchers in the area of resistance to change, such as Maurer [26], find that the predominant way implementers of change responded to employees' reactions were to resist their resistance – i.e. meet force with force. Managers prepare for the change process by estimating the degree of resistance that they expect to encounter. People do not resist change *per se*; rather they resist the uncertainties than the potential outcomes that change can cause. Managers must keep this in mind at all times. Resistance can play a crucial role in drawing everyone's attention to the aspects of change that may be inappropriate or not well thought through. Communication and consultation with employees in a participative fashion (fig 15) is crucial in controlling and utilising resistance. Managers should facilitate teamwork. Participation must be handled carefully and in most circumstances, should seek not only to inform but also to involve employees in building their own future. Managers should avoid being perceived of as planning other people's future without their say.

### **3.10 Summary**

In this chapter I have described my approach to change management. The main argument of this chapter is that the aforementioned strategies are required in order to bring about change. This change must be brought about in a systemic manner and hence change management is an essential part of the model for Managerial problem solving (figure 11). The various aspects of my approach to change management are the domain of different nodes of the model e.g. generating options is part of Problem Formulation, action and reflection are part of Qualitative research. Hence, Change Management does not belong to any specific node of the model shown in figure 11. The following chapter describes the intervention itself and begins with a background into the context of the project i.e. the new Skills development legislation.

## **Chapter 4-Skills Development in The Organisation.**

The previous chapters have described my approach to the broad area of concern for this thesis - problem solving. This chapter deals with the field of focus for the project - skills development. The model for problem solving, as described in the previous two chapters must be applied with a view to evaluation and this chapter describes the intervention.

### **Background**

After six years of negotiations between Business, Labour and the South African Government, the Skills Development Act has become law. The Skills Development Levies Act supplements this act and is essentially a tax. These acts are primarily concerned with industry-based training, improving the intermediate level skills base of the country and labour market training for target groups (including the unemployed, retrenched workers, youth, women, people with disabilities and people in rural areas). The Act seeks to develop the skills of the workforce, increase quality of the working life and encourage companies to become learning organisations (as its proponents argue). A brief outline of the Act is given below and further details are provided in Appendix H. The merits of this Act are not discussed but rather an understanding of the application of this Act within an organisation is sought with a view to designing an intervention in the area of skills development, which is the field of focus for this research project.

#### **4.1. The Skills Development Act**

*To provide an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce; to integrate those strategies within the National Qualifications Framework contemplated in the South African Qualifications Authority Act, 1995; to provide for learnerships that lead to recognised occupational qualifications; to provide for the financing of skills development by means of a levy-grant scheme and a National Skills Fund; to provide for and regulate employment services; and to provide for matters connected therewith. [From the Act]*

The objectives of the Act, as stated by government, are to:

- Establish a stronger institutional and financial framework than that which previously existed under the old Act,
- Replace the National Training Board with the National Skills Authority (NSA), a ministerial advisory body that will see to it that national skills development strategies, plans, priorities and targets are set and adhered to and to
- Replace industry training boards with sector education and training authorities (SETAs), which will develop sector skills plans that conform to the national skills strategies and targets.

The Act has been aligned with the South Africans Qualification Authority Act (SAQA) in an attempt to:

- Promote the quality of learning in the labour market, and
- Give organised employers and workers greater responsibility for ensuring relevant training.

The Act also introduces:



- A **compulsory levy grant** equal to 1 per cent of the payroll of all companies and to be collected by SETAs and a national collection agency assigned by the Minister. Government is also bound by the Act to pay 1 per cent of its personnel budget for skills development. Twenty per cent of the collected funds will be paid into a National Skills Fund (NSF). The rest will be paid as grants to firms that already carry out accredited training
- Two **learning programmes**. The first is learnerships, which incorporate traditional apprenticeships, and include structured learning and work experience that lead to qualifications in areas where skills are needed or opportunities exist in the labour market. This, proponents of the act argue, will assist young unemployed people to become employed and workers to improve their skills. The second are skills programmes that should also meet quality and relevance criteria to qualify for grants from the NSF or SETAs. (See Appendix H for further information on these aspects of the Skills Development Act and related legislation).

In terms of the above, it is necessary to examine what skills development is as defined by the Act.

**Skills development** is taken as the development of competent performance by an individual for a specified and yet dynamic social or economic purpose. A skill is defined as “practiced ability” by the Oxford dictionary. Skills development is not seen as preparing individuals for the isolated performance of a routine task in an unchanging environment - a very mechanistic and outdated notion - but rather the development of the necessary competencies, which can be expertly applied in a particular context, for a defined purpose. It is envisaged by the government, that these competencies will be transferable in the same way that formal qualifications currently are. In this definition, the competence *of skill* is emphasized and this competence is divided into:

**Practical competence:**

The demonstrated ability to perform a set of tasks

**Foundational competence:**

The demonstrated understanding of what we or others are doing and why

**Reflexive competence:**

Our demonstrated ability to integrate or connect our performances with our understanding of those performances so that we learn from our actions and are able to adapt to changes and unforeseen circumstances.

In the past, if employers did send employees for training, few would be registered as Apprentices, qualifying to be recognised as Artisans. Most would be sent on single-machine training, with the result that these employees’s could spend their whole working life on a single machine, never being multi-skilled or permitted to upgrade their competencies. Very little formal recognition was given to on-the-job experience, especially in the blue-collar area, thus making the transfer of these skills to other companies very difficult. The Skills Development Act charges SETA's with the task of ensuring that training and development is holistic (or systemic in my view) rather than single-machine (mechanistic) focused. The result is that this Act, working in-conjunction with the South African Qualifications Act, requires and enforces the construction of Standards and Qualifications linked to the National Qualifications Framework, where those Standards and Qualifications are comprised of more than simply a focus on one machine, or a restricted task.

Essentially every qualification under the auspices of a SETA must be comprised of three categories of (what the Act terms) competencies, which are defined above. The first is the Fundamental category, competencies such as literacy and numeracy, considered to be the building blocks upon which skills training can ensue. The second category required in a qualification is a Contextual competency, referring to an understanding of the context within which that skill is practiced - the context of income, expenditure and profit and loss, the Industrial Relations context of the work itself, and the job in-relation to general business practices. Once the building blocks of skills training have been established, and these work practice have been placed in the context of the business and the working environment, only then can actual skills training take place, focused on generalised competency development and not simply on a mechanistic operating task [21].

In-terms of the Act, all employers are required to fund training as an operational expense. Previously employers could avoid paying for training, even in Industries where there was a registered Training Board, because non-payment was not a criminal offence. The Skills Development Levies Act makes non-payment of Training Levies a criminal offence punishable on the same basis as the non-payment of Income Tax.

The Skills development Act essentially forces training and skills recognition and will directly affect the bottom line. Every employer in South Africa who is registered with SARS (South African Revenue Services) for PAYE or has an annual payroll in excess of R250 000 is eligible to pay the levy. Levies must be paid at regular intervals throughout the tax year. A certain amount of the levy can be claimed back based on the type of training that a company undertakes. In the first year of the levy grant scheme a company can recover in grants a minimum of 50% of the levy paid on condition that all the requirements for the different grants are met. The details of these requirements have not been fully specified but it is widely accepted that a grant will be accepted based on the type of training undertaken. Since the Act is directed at uplifting previously disadvantaged groups within the South African context, it is accepted that the grant will be based on training expenditure directed towards operator and ABET (Adult Basic Education and Training) type training. Certain types of Management training, for example, would be excluded from a grant.

The Skills Development Act has far reaching consequences for South African industry. Questions arise such as how a skill is related to a competency? And, how does this affect training and development within the organisation? Proponents of the Act claim that it has the potential to move a company towards a learning organisation model (discussed later). If this is possible, then the question becomes one of implementation i.e. how do companies implement skills training with a view to becoming learning organisations whilst competing in the global arena? Competency is often not well defined, or not defined at all in some of the literature on competencies. This lack of a specific definition hinders the application of the concept. If a manager, or a writer were to clarify the purpose of their use of competency and to define the term within the context of that purpose, the task of description and the sharing of understanding would be improved. The following section gives a brief overview of the project and the timeline is presented in order to assist the reader in contextualising the implementation cycles. Thereafter, the organisation is presented and the first cycle of the project is presented and the above questions are addressed.

#### **4.2. The Initial Project Plan**

The preliminary objective of this project is to investigate Skills Development within an organisation in the light of the latest legislation on the topic. A skills evaluation tool was available at the organisation that I work for and this tool was to be used to generate skills definitions. The Training Manager at the organisation develops these skill profiles on an ongoing basis. The initial intention was not to specifically evaluate the skills profiling method but rather to focus on the relationship between skills and training and the establishment of Skills development priorities. Skills development implies that training and skills plans are developed concurrently and this approach will be investigated in the research process. The emergent design feature of qualitative research allowed for the initial focus of the research to change as the project progressed. As data emerges from the first intervention, this data could then be analysed and the initial focus revisited and adjusted.

#### **The Intervention. (As initially conceived)**

The Qualitative research method of interviewing lends itself to this project in that, by the use of interviews, staff participation in the skills development process can be ensured. Participation is an important priority in the company as shown by previous research results that have been generated by myself at the company (see figure 15). This intervention starts by compiling a skills profile for a particular group of employees. This profile will then be discussed with employees in the form of an interview. The purpose of the interview will be to establish a dialog on skills. The purpose of qualitative research is 'accumulate sufficient knowledge to lead to understanding' [2] and at this stage of the project, more knowledge is sought about the skills development process. This knowledge can be gleaned from:

- Interviews. The initial phase of this project has relied on information obtained mainly from international journals on training and development. An important aspect that has not been considered at this stage is the cultural aspect of the development process. The interviewing technique will be helpful in surfacing attitudes towards skills development. The corporate culture must also be considered. Questions such as 'what is the companies attitude to training' must be explored as well as staff perceptions of this 'attitude'. If the company approach is one of conserving short-term profits to the detriment of the potential (longer term) payoffs that training offers, this may also require that the initial direction of the project is refocused. The interviewing technique is able to surface these values, if structured correctly i.e. asking the right questions.
- Observations. Apart from actual interviews, an observation of the participants is another form of data collection that will be used. The stated goal of the MD at the company is to 'drive HR down the line'. This means that the current functions performed by HR are being placed more and more in the hands of the line managers and supervisors. The role of the HR department is also changing to that of a consultant type role including such functions as facilitation and specialist HR work. With this in mind, observations of this process are required to determine if and to what extent the current method of skills evaluation can be incorporated into the line management function.
- Review of documents. A preliminary review of available literature has been conducted and the results have been presented in the previous sections. Internal documentation is also reviewed as part of the research process and this aspect is discussed in the next section (some of these documents are also given in the appendix). The emergent design feature of qualitative research means that once the initial interview and observational results have been analysed, the document

Reviewal stage be revisited.

Qualitative research does not rely on random sampling, but rather samples are purposefully selected and context sensitivity is taken into account. The action research approach (figure 9) has also been adopted with the intention of not only bringing about an increase in knowledge and management practice for myself but, of equal importance, is that an improvement for the organisation as a whole is also brought about via the intervention. The various phases of the project are given on the following timeline. A three-cycle process was followed with the first phase ending at the point of the Skills Forum i.e. the point that the skills developers interview employees.

<b>Project Timeline</b>	<b>Started</b> (Mm-2000)
Request for Training Database	March
Initial Database Implemented	June
Employment Equity Started	May
Skills Forum Started	July
Head Office T&D Strategy Presentations	July
Training Database Revisions	August
Towards Competence CLD	August
Start of Activity Based Costing Process	August
Restructuring Announced	September
Web Enabled Database linked to ABC	November
Learning Organisation Survey	December

**Table 10: Project timeline**

#### **4.3 Initial Objectives of this Project.**

- **Implementation of the Skills development Act.**
- **To provide benefit for the Author in terms of learning and personal skills development.**
- **To provide benefit for the organisation by brining about an improvement in business practices as a result of the work of this project.**

University of Cape Town

#### **4.4. The Organisation: The Cape Town Business Unit.**

The Cape Factory supplies decorative and industrial paint to the local sales department. Sales and production data is given in Table 4 below. The value chain for the organisation (an HR Document) is presented in figure 16.

<b>CAPE TOWN</b>	<b>QUANTITY (Litres) (000's)</b>
TOTAL SALES	9,768
TOTAL PRODUCTION	6,327
MANUFACTURED FOR CAPE TOWN MARKET	4,064
PRODUCTION EXPORTED	2,283
PRODUCTION IMPORTED FROM OTHER CENTRES (TVL, Natal & P.E)	4,995

**Table 4: Production and Sales Overview for Plascon Cape Town**

(9 months to June 2000)

The Cape Town factory produces on average 900 000 litres of paint per month, of which approximately 350 000 litres is exported to the Gauteng and Natal regions. The exported content consists of all paint items sold by Plascon with the exception of the Automotive Paints. Production is also imported from the Johannesburg, Durban and Port Elisabeth factories. The imported production is made up of bulk items that are produced in large batch sizes i.e. >2500 litres. The supply from P.E is automotive paint only as this is the specialist centre for this type of production. Plascon Cape manufactures a much higher variety of products (product mix) than the Transvaal or Natal counterparts. The production unit has a staff of 85 members. Various other departments support this and total manufacturing staff is 110. Sales and Distribution staff number 122

Current constraints on the business unit include:

- Policy formulation (set by Group in Johannesburg)
- Preferred suppliers (set by Group)
- Only one customer is serviced by the production unit i.e. the local Sales department.
- Limited Investment into the Cape Town Site (by Group).
- Inefficient production layout

From a cybernetic (see also appendix J) viewpoint, the recursion levels for this study are set at:

Recursion Level 0: Entire Group

Recursion Level 1: The Cape Business unit

Recursion Level 2: Cape Town Production Unit

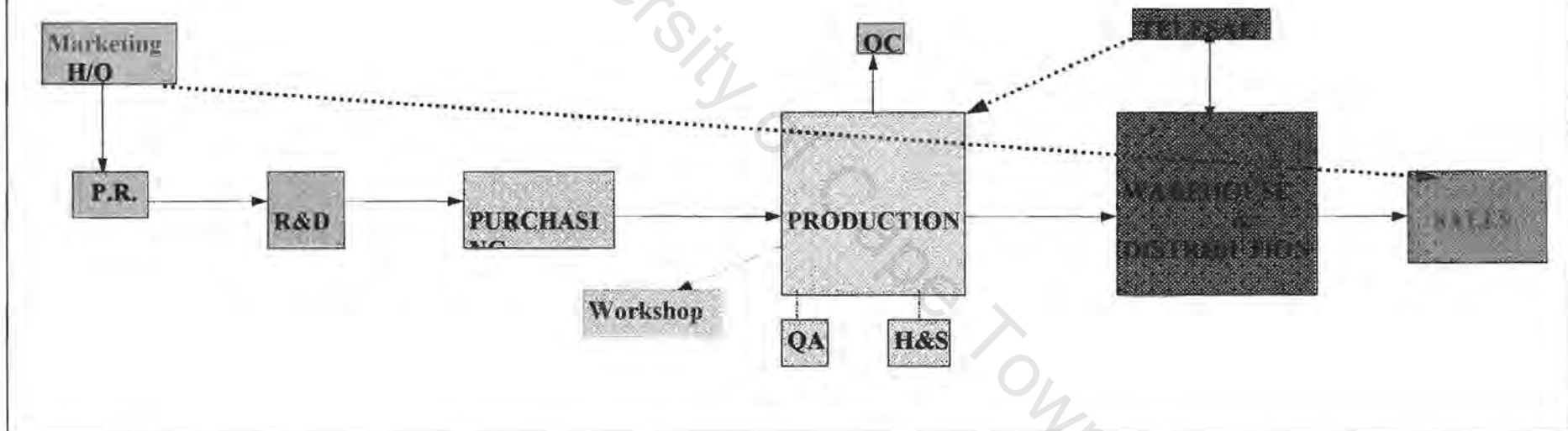
Recursion Level 3: Units within the production unit e.g. Water Plant, Oil Plant etc.

This study is concerned with the viability of the system at recursion levels 1 and 2 and the contribution of these levels to the viability at the broader level of the group of companies. An overview of the functional areas of the business and the mission statement is provided on the following page.

### Plascon Mission Statement:

Our mission is to strengthen our leadership position in selected market segments of the coatings industry, through service excellence, unqualified integrity, product quality and the development and participation of all our people, simultaneously earning a return on investment that satisfies our shareholders.

### Functional areas:



**Figure 16: Functional Value Chain**



Figure 16 shows the functional relationship between the Production unit and the other units within the organisation. It is provided by the Training Manager at the company in order to give the reader an overview of the business. The diagram shows only the primary relationship and, I believe, is fairly standard for a mid-sized manufacturing concern. The business idea (BI) is the organisation's mental model of the forces behind its current and future successes [54]. Once the business idea has been established, the unit will be further analysed to determine the main factors that support the BI and underlying factors that promote viability.

#### **4.4.1. Establishing The Business Idea**

Interviewing techniques were used to establish the business idea for the production unit. The business idea is the organisation's mental model behind its current and future successes. Osborne et al [46] assert that each value creating subsystem within the organisation should have its own business idea that is in line with the broader aims of the holistic organisational business idea. Interviews were conducted to this effect in order to establish the business idea and the results have been assimilated in the drawing presented in figure 17.

Referring to figure 17, there is a twofold customer need of paint and efficient service. This need is seen from the perspective of those interviewed. The current entrepreneurial intention is that of a "Flexible Manufacturing Site". The Cape Town site is flexible in that almost all of the 1800 products (in 400 different pack sizes) stocked by Plascon can be made at this factory, within an acceptable and reliable lead-time. Van Der Heijden [54] maintains that:

*This idea is specific to the organisation, and no two  
Organisations can have the same Business Idea*

The combination of flexibility with efficient service yields a unique business idea for the production unit, within its market. This combination is fairly well understood by numerous people at various recursion levels within the organisation as surfaced by the interviews that were conducted. The value creating subsystems within the production units do have business ideas that are in line with the broader aims of the production unit.

The business idea indicates that the competitive advantage of the production unit is differentiation. The unique attributes are:

- Low lead times
- Lower cost (on bulk items)
- Successful Project Work. I.e. launching of new product ranges.

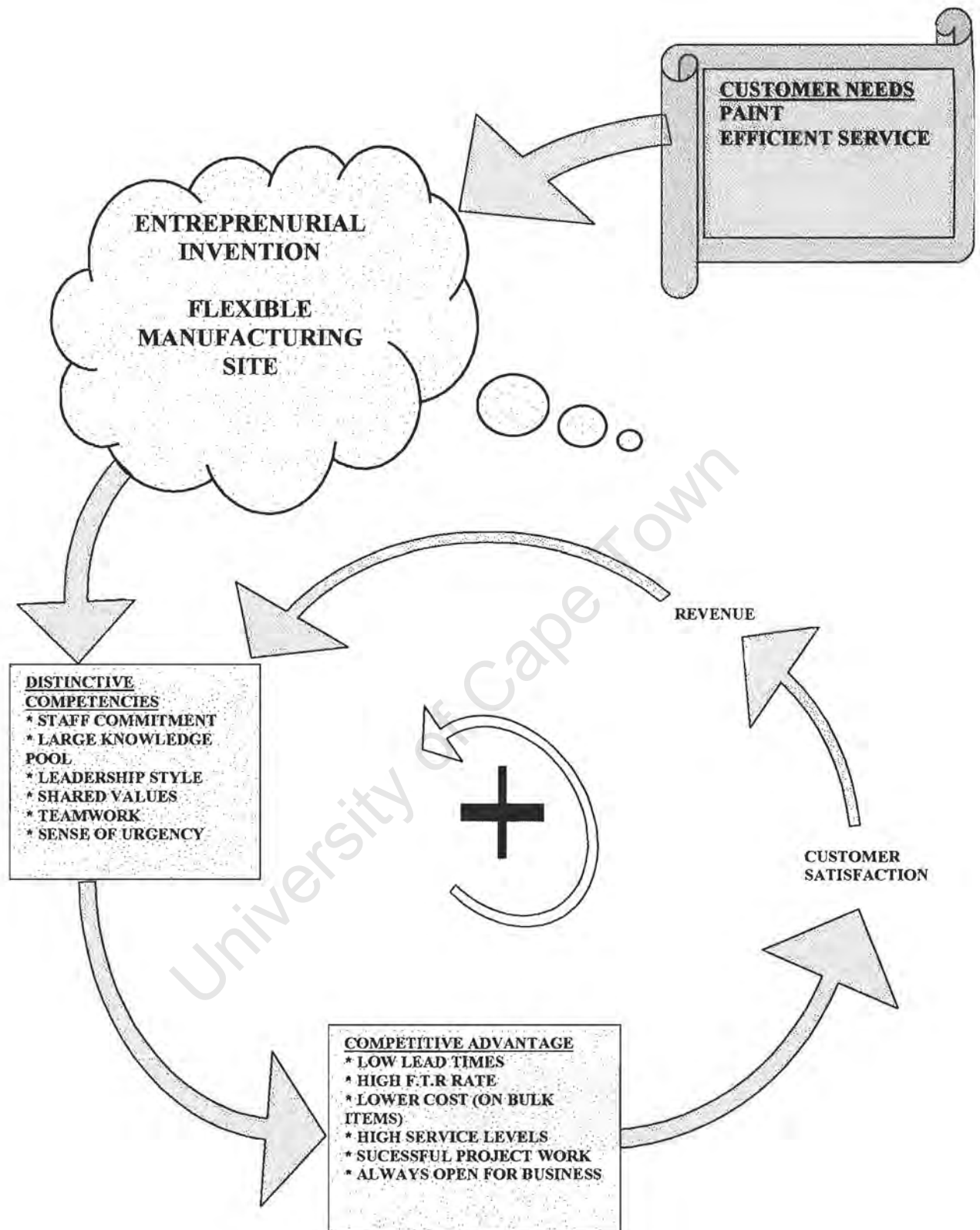
The interviews indicated that the distinctive competencies that lead to the aforementioned competitive advantages are held to be the level of teamwork at the factory and also the large amount of knowledge at the factory. Many staff members have been at the factory for 10 years or more and it is largely this factor that contributes to the flexibility/low lead-time combination, across the spectrum of products on offer, that the Cape Town factory is able to supply. There is a large amount of product and manufacturing knowledge held by the staff members (my observation). It should be noted at this point that factory formulations do not reflect accurate manufacturing procedures and techniques. The production staff tacitly hold many of these

techniques, particularly with regard to small/infrequent batches. The combination of distinctive competencies produces a unique formula for this production unit, within the broader system, or level of recursion i.e. the Plascon Group.

The competitive advantage that the Cape Town production unit has over other factories in supplying the local sales department is seen by the interviewees as low lead-time. A factor that contributes to the low lead times is the high First Time Right (F.T.R) ratio at the factory. On average, 70% of batches made at the factory do not require additions and re-testing (Q.C). This compares with 20-40% that is achieved at the other centres. The Cape Town factory has also produced very successful project work in the past. This was evidenced recently by the successful launch of the recently introduced Colour Expressions range of products. A high amount of flexibility in both processes and people was required for a developmental project of this nature.

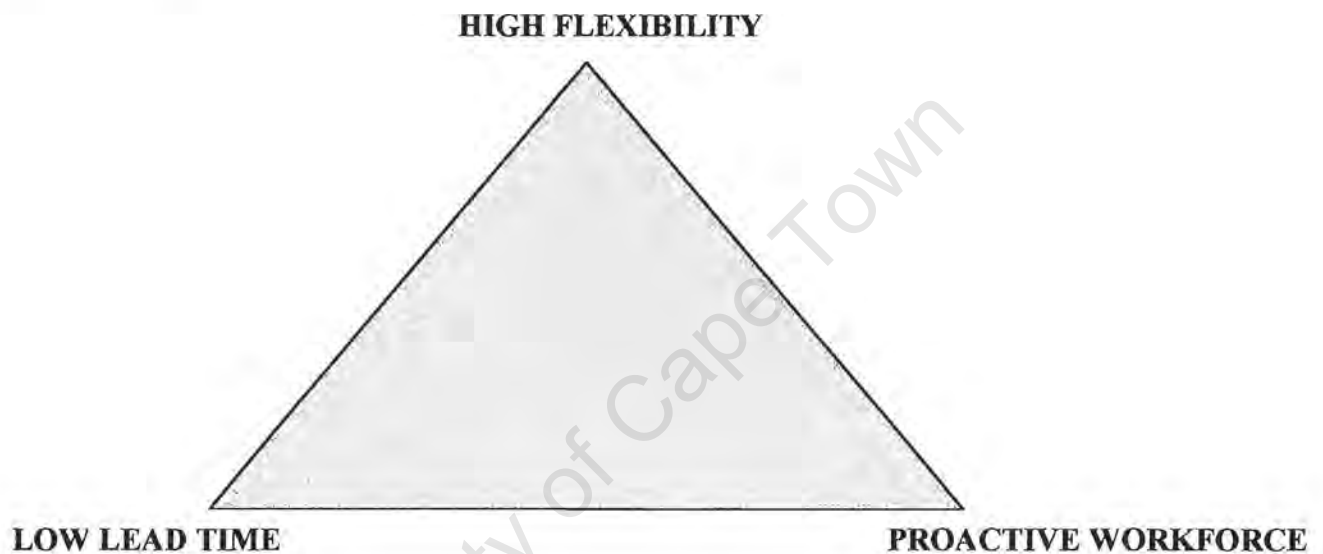
The lower cost aspect affects only a small number of bulk products. On many items made at the Cape Town centre, the packed cost is higher due to higher raw materials costs. The sites where bulk raw materials are refined e.g. titanium dioxide, are closer to the Durban and Gauteng manufacturing sites. Hence a premium is paid in shipment of the raw materials to Cape Town. This also applies to sheets of printed tin plate.

The level of staff commitment, combined with the other factors mentioned above, resulted in a strategic decision at the Group level to support the local manufacturing unit as "insurance for the broader group. This meant that the Cape factory could always be used as a backup and alternate source of supply in the event of a disruption to production at the Johannesburg or Durban manufacturing centres due to industrial action or otherwise. This is indicated in the sketch of the business idea on the following page as being "always open" for business.



**Figure 17: The Business Idea (structured according to Van Der Heijden (1994))**

The initial interviews that were conducted (see end of Appendix D) indicated that the distinctive competencies that lead to the aforementioned competitive advantages are held to be the level of teamwork at the factory and also the large amount of knowledge at the factory. Many staff members have been at the factory for 10 years or more and it is largely this factor that contributes to the flexibility/low lead-time combination, across the spectrum of products on offer, that the Cape Town factory is able to supply. There is a large amount of product and manufacturing knowledge held by the staff members in comparison to other Production units in the Group. It should be noted at this point that factory formulations do not reflect accurate manufacturing techniques. Works procedures are laid down but there is an element of "art" when working with certain types of paint, particularly when developing new products, and hence I use the word technique. The production staff tacitly hold many of these techniques, particularly with regard to small/infrequent batches and development work. The combination of distinctive competencies produces a unique formula for this production unit, within Plascon. The key factors of the business idea are summarised in the following diagram.



**Figure 18: Key Factors In The Current Business Idea**

The previous paragraphs set the context for the research project. The main external factor that must be incorporated is the Skills Development legislation. The internal factors such as structure and business idea have been described in the previous section. This sets the scene at the start of the intervention and this is described next.

#### 4.5. The Training and Development Database

I was approached by the Training Manager in March 2000 with a request to build a database for training courses that was in line with the requirements of the Skills Development Act, as specified by him and described at the beginning of this chapter. Briefly, this meant providing the ability to categorise training courses depending on the training level of the course and to then automatically calculate the portion of the skills levy that could be reclaimed from the Receiver of Revenue. The main input form for the database is shown below and a brief description of the form follows.

The screenshot shows a software interface titled "Training Plan". At the top left is a button labeled "see Skills". To the right, there are fields for "Employee" (PRITCHARD), "Initials" (JV), "Department" (152-05), and "Grade" (CU). Below these is a "Job Title" field containing "SALES REP SNR".

The main part of the form is a table with the following columns: "Training Year", "Course", "Current Cost", and "Training Level". The table contains five rows of data:

Training Year	Course	Current Cost	Training Level
2000	Customer service	R 850	SALES
2000	SALES CONFERENCE	R 3,500	SALES
2000	Customer service	R 850	SALES
2001	SALES CONFERENCE	R 3,500	SALES
2001	Customer service	R 850	SALES

Below the table, there is a summary section with "Items" set to 13 and "Total Cost" set to R 26,950. At the bottom left, there is a "Record:" indicator showing "1 of 13". At the bottom right, there are buttons for "Courses", a magnifying glass icon, "Back to last", "Start...", and "HELP".

**Figure 19: Training and Development Database – Training Planner**

An employee is selected from a list of all the employees on site at the top of this form (see Appendix O for further details of this process). Once a name has been selected, the training plan for that employee appears as shown above. A summary of the details for the selected staff member is given in the top right of the form. A training year is selected in the column on the left and then a course is selected. The course cost is kept on a separate form, which can be accessed, from the bottom left of the training plan form shown above. Finally, the Training level for a particular course is selected. In this case, the training level is the level as described in the Skills Development Act (managerial, supervisory, adult basic education etc) but can also be expanded to include custom levels. In example shown in figure 19, the training level for all the courses selected is "Sales". The training manager also requested that individual skills profiling should be linked to the training plan for the purposes of program output and thus Skills input form was designed and is shown in figure 20. The objective is to enable the concurrent development of skills profiles and training plans, as requested by the Training Manager. This can be seen from the button at the top left of either form. When an employee is



selected, the user (initially the training manager) can switch between the skills profile and the training plan. The training manager requested this facility in order to speed up the development of the Training plans. It must be noted here that new training plans were not developed at this stage, but rather existing training plans were adapted to suit the new legislation by categorising each training course as described above. The Skills list (figure 20) was requested in order to facilitate the development of future training plans. The skills list shown below contains the results of a skills assessment for a particular individual. At this stage of the project, an assessment technique was in use by the training department (using a software package known as HR Pro) and the form shown below was used only to capture the **results** of these previous skills assessments. The "Action" column on the right of the form indicated what action should be taken in accordance with the rating of a particular skill.

**Skills List**

Employee: **PRITCHARD** Initials: **JV** Department: **151-01** Grade: **CU**

Job Title: **Credit Manager**

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Skill	Rating	Weight	Action
WRITE A SPECIFICATION	8	9	
Communicate	9	9	Counsel
CUSTOMER RELATIONS	4	5	Coaching
PROBLEM SOLVING	4	5	Coaching
Plan	3	2	
*	0	0	

Skill Level: **53%**

Record: 1 of 5

Buttons: Skill Types, Actions, Back to last, Start..., HELP

**Figure 20: Training and Development Database – Skills Profile Summary**

The results of an individual skills profile and training plan are shown on the following two pages. This was the primary output of the program (at that stage of the project). The initial request by the customer (the training manager) was to show a skills profile on the left and a training plan on the right of a page and this is shown overleaf. The purpose of the layout, in his words, was "to summarise the skills plans and then show the direction in which the skills were being developed by showing the training plan adjacent to the skills profile". The second page of the report places the training plan into the context of the department where the staff member works. Thus individual training costs can be compared to the training costs of a department.

At this stage of the project, I was only concerned with the feedback from the customer and this was, in the main, very positive. He reported that the staff members reacted very positively when the profile/plan, as shown in the following two pages, was discussed with them on an individual basis. The training manager noted phrases such as "now I can see that I have a future in this place" when he discussed the plans with

certain staff members. This indicated a subtle change in the meta-language of the system (see also the end of Appendix D). He was however, not comfortable with the rating of skills and wanted to show only the skills and their associated actions. He said he preferred to use the existing skills profiling program. This program was very comprehensive and geared specifically towards skills profiling. Thus the Skills list shown above was adapted to serve as a summary of the output of a skills profile from another software package. I explained that the ratings and weights were an additional feature and do not have to be used i.e. the fields in the database can be left blank, and he was satisfied with this. Various other reports were initially available (June 2000) from the training database and presented in Appendix A.

University of Cape Town



# Employee Training and Development

From 2000 to 2004

Training Department

The budget plan for the department is on the last page

## Department 152-01 Retail Sales

Name	WT ASHBURY	EmployeeID	81664
Department	152-01	Grade	CL
Job Title	SALES REP	Union Designated	

### Skills Profile

Skill	Rating	Weight	Action
PROBLEM SOLVING	6	10	Practice
INCREASE GP%	6	10	Mentoring
IPS	4	6	Coaching
INITIATIVE	6	4	
CUSTOMER RELATIONS	6	4	Train
<u>Skill Level</u>	45%		

### Training Plan

Course	Year	Current Cost
ASSERTIVENESS	2000	R 1,500
Customer service	2000	R 850
EXCEL (B)	2000	R 500
PRODUCT KNOWLEDGE	2000	R 350
SALES CONFERENCE	2000	R 3,500
Sales Management	2000	R 3,600
WORD (B)	2000	R 1,000
Communications	2001	R 2,000
EXCEL (I)	2001	R 500
MDC	2001	R 3,000
SALES CONFERENCE	2001	R 3,500
SAPMA	2001	R 2,223
Customer service	2002	R 850
Leadership	2002	R 2,000
SALES CONFERENCE	2002	R 3,500
SALES CONFERENCE	2003	R 3,500
TIME MANAGEMENT	2003	R 800
Advanced communications	2004	R 2,000
Finance	2004	R 5,000
SALES CONFERENCE	2004	R 3,500
<u>Training Cost</u>		<b>R 43,673</b>

Compiled by Phillip Twynam

Friday, October 26, 2001

Page 1 of 2

**Table 5: Individual Skills Profile and Training Plan Report**

**Department Budget**

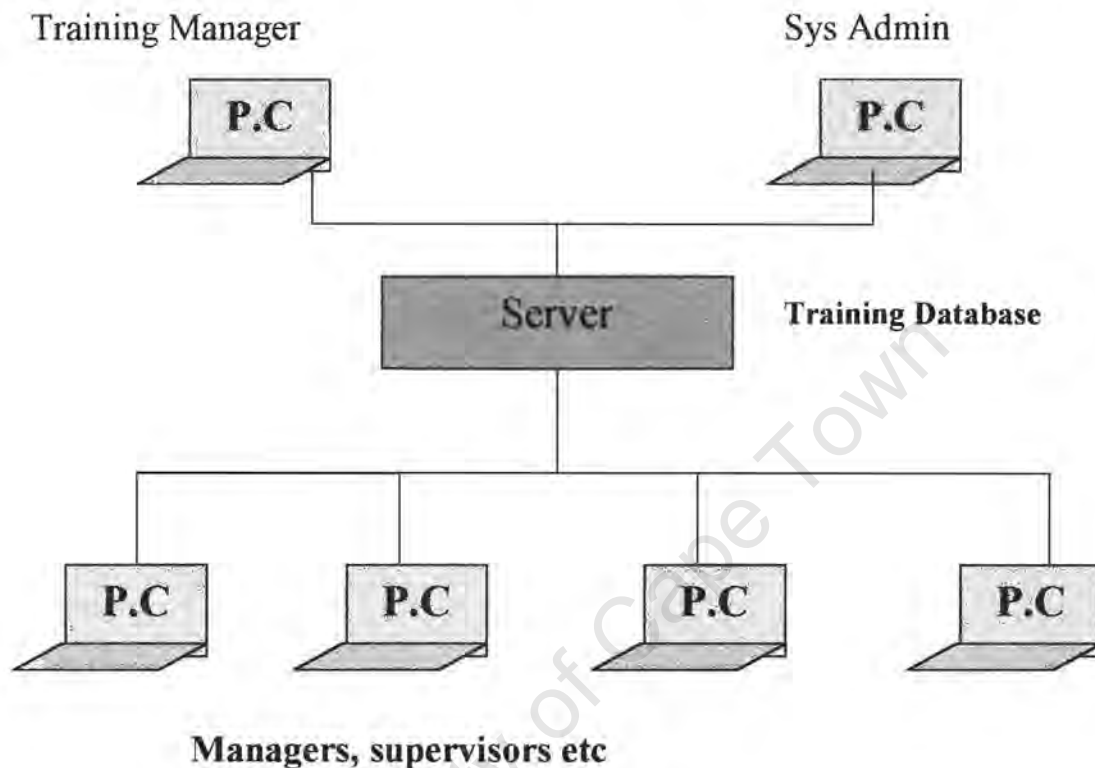
Year	Inflation rate (%) = 9.2	
	Current Costs	Inflated Costs
2000	R 119,573	R 119,573
2001	R 86,146	R 92,978
2002	R 66,850	R 79,714
2003	R 62,850	R 81,838
2004	R 65,060	R 92,495
<b><u>TOTAL</u></b>	<b>R 399,469</b>	<b>R 466,598</b>

Compiled by Phillip Twynam  
Friday, October 26, 2001 Page2of2

**Table 5: Individual Skills Profile and Training Plan Cont.**

#### **4.6. Cycle 2 Implementing the Intervention.**

Observations from the first cycle of the project have been presented above. These observations detail the period up to the end of June 2000. At this point, my plan was to distribute the training database to the various managers in order to facilitate the development of training plans. This plan is presented below. I felt that this would be in line with one of the stated objectives at the company namely “to drive HR down the line”. This was a stated objective of the company MD. Hence I felt that the following plan would speed up the development of training plans.

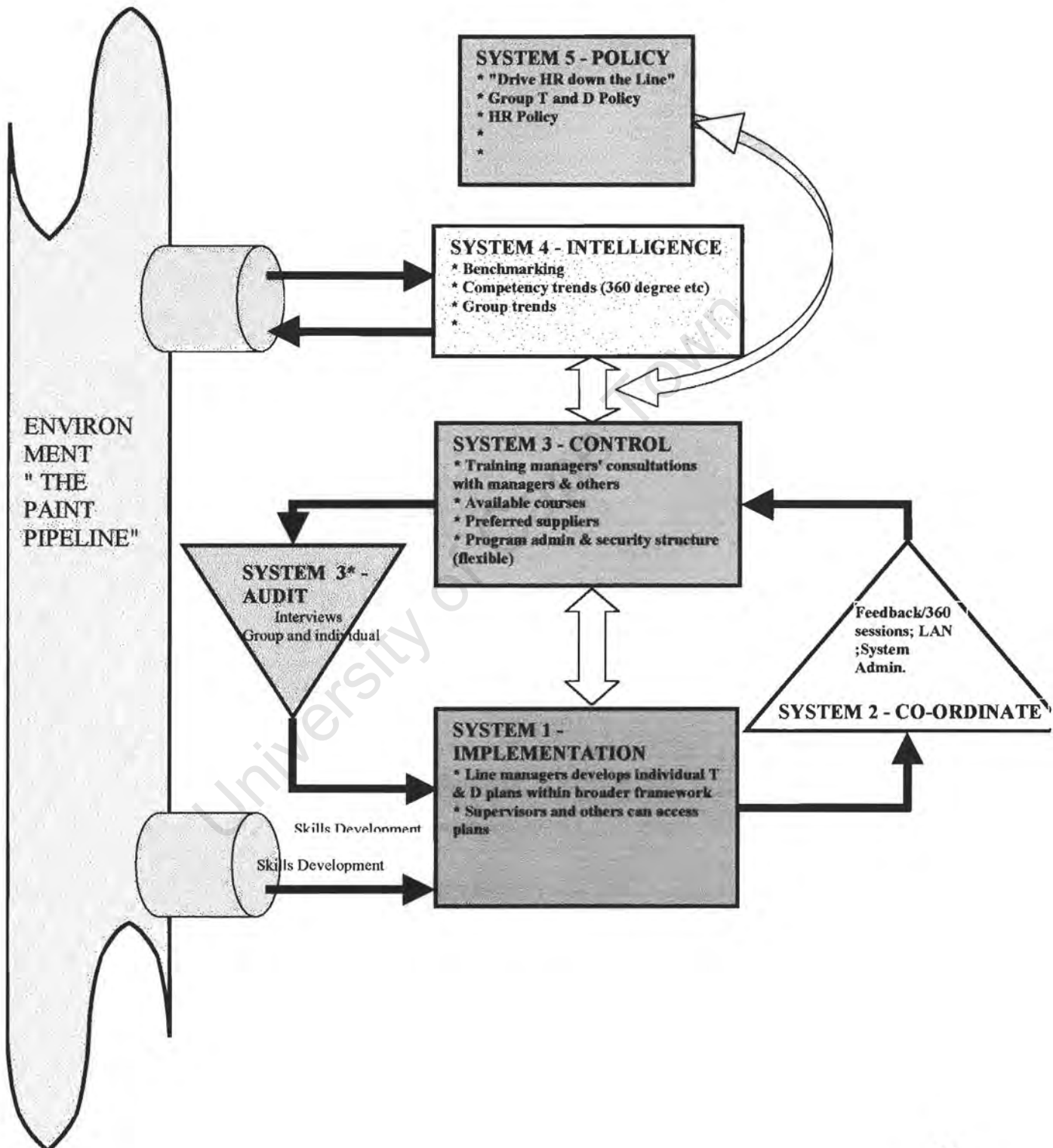


**Figure 25: A Distributed Training and Development Database**

At this point, a viable systems diagnosis (VSD - See Appendix J for further information) of the Training and development system was also undertaken and the results are presented on the following page. The policy of “driving HR down the line” is shown as a system 5 function. This was a stated objective and no clear guidelines (on paper) as to how this should be achieved were obtainable. The functions of the Training Manager lie mostly at the system 3 (control) level. As the overall controller of the database, the Training Manager would specify training courses, vendors, prices etc. In a distributed system as sketched above, this information would then become available to the managers at the implementation level – system 1 – as they prepare training plans for staff members. The training managers would be involved at an implementation level as far as skills profiling and recommending of appropriate training courses is concerned. System 4 is concerned with benchmarking (amongst other things) and this consisted mainly of comparisons with other companies gleaned at seminars etc (see appendix D). The audit channel – system 3- contains mainly interviewing functions as a means of checking whether line managers are using the system optimally. Under this type of training system, the training database would perform a system 2 function namely that of co-ordination. The data gathering and sorting features of relational databases were used to extract

information, which enhances this co-ordination function and take it to a new level, as described in the following section.

**Figure 26: Viable Systems Diagnosis – Training and Development**



After the above diagnosis, I identified various areas where further research was necessary. It became evident from informal interviews that skills development could not be approached in isolation but rather skills development forms part of a broader area of study and focus in the business world, namely that of competencies. It was also important at this point to draw in other stakeholders before proceeding with a design as proposed in the previous section. This meant discussions with the various managers and particularly the training manager in order to establish the real need i.e. *was a distributed database really necessary at this stage?* The scope of the problem had also changed because I had been requested to join the Skills Consultative Forum. This forum was to address the Skills Development Act and its relationship to the Employment Equity Act, with particular attention being paid to the equitable distribution of training funds. An overview of the relationship between the two acts is provided in Appendix B. The following section will explore the above question and deals with skills and competencies. It is also intended to be an initial survey into current international practices in this area, and is seen as part of the emergent design process of QR.

#### **4.6.1. What is Competency?**

The term “competency” has an array of meanings and applications. The Oxford Dictionary gives the meaning of competence as ability or status. The application of this is wide and varied depending on the context, as described by Hoffman [37] and others.

- Psychologists were concerned with the concept as a measure of ability and whether the observable performance of a person represented their underlying traits or capacity.
- Management theorists applied a functional analysis to define how organisational goals were to be best achieved through improved individual performance.
- Human resource managers viewed the concept as a technical tool to implement strategic direction through the tactics of recruitment, placement, training, assessment, promotion, reward systems and personnel planning.
- Educationists attempted to relate the idea of work preparation and professional recognition with that of a broad education.
- Politicians, including those involved in the political process such as Trade Unions, Employer groups and political parties, particularly in the UK and Australia, have used the concept as a means of improving the efficiency of the labour market.

The above examples illustrate that the meaning of competency shifts according to the context of its use and the requirements of the user. The term can either refer to outputs, for example training, or to inputs i.e. underlying attributes. The input based model predominates in North America, as observed by Hoffman [37], where competency refers to the underlying attributes of a person. The output-based model is more common in Europe. In this model, competency is seen more in terms of measurement of performance against a set of standards. It asserts that competency is best used as a measure of output of learning.

*The difference in perspective between the input and output approaches has lead to much confusion about the meaning of competency. A traditional focus on learning and processes of learning was seen to be a hindrance to work place learning and assessment. By making the approach performance based, learners were required to show that they could do the tasks required of them. Those charged with the training and assessment of workers under this approach to*

*competency based learning needed only to concern themselves with observable outcomes. This approach was seen to be more readily applicable to the workplace. Hoffman [37]*

Training and assessment of performance is the thrust of the output-based model and this is the approach taken by the South African legislators.

In the context of the Skills Development Act, competence as applied to skills means: -

**Practical competence:**

- The demonstrated ability to perform a set of tasks

**Foundational competence:**

- The demonstrated understanding of what we or others are doing and why

**Reflexive competence:**

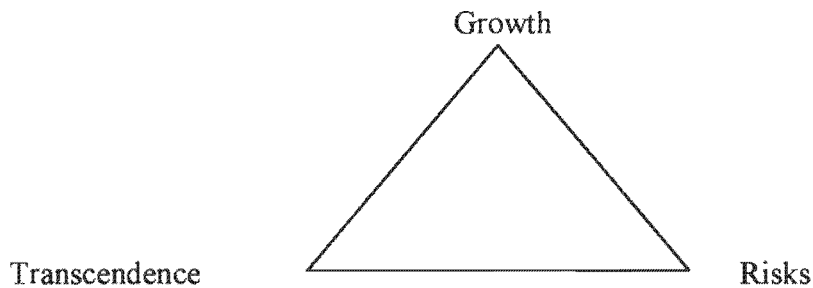
- Our demonstrated ability to integrate or connect our performances with our understanding of those performances so that we learn from our actions and are able to adapt to changes and unforeseen circumstances.

The above definition is output based and refers to the competent performance of a skill by an individual. The relationship between the individual and the company is hinted at under the functional competence category but this is dependant on interpretation. It is important to explore this relationship because competency is often referred to in the context of the overall company.

In the corporate world, core competencies are often mentioned. In the organisation that I work for, this term was a buzzword at one stage. Hamel and Prahalad [27] argue that a key challenge in competing for the future is to pre-emptively build the competencies that provide gateways to tomorrow's opportunities, as well as to find novel applications of current core competencies. The term competency is referred to within the context of overall performance goals. Hamel defines a competence as a bundle of skills and technologies rather than a single discrete skill or technology. A competency is seen to represent the sum of learning across individual skill sets and individual organisational units. The main questions asked when using this approach to exploring competency are:

- What distinctive attributes does the company have?
- How are these distinctive attributes supported and maintained?
- How do competencies contribute to the overall business idea held by the company?

The search for distinctive attributes is important in that it forms the basis of competitive advantage for many firms. Hamel and Prahalad conceive of competition for the future essentially as competition for competence and three reasons are put forth as shown below.



**Figure 27: Competing for Competency**

- **Transcendent.** Core competencies are not product specific. The skills and competencies (bundles of skills) that are used to generate products often outlast the product. A good example of this is in the IT industry where product life cycle is relatively short but the competencies that are used to produce the product are often translated onto the “new release” e.g. the DOS to Windows transition.
- **Risks.** Nurturing a competence is not a short-term strategy. Interventions may extend over several years and also require a holistic approach. This requires managers to recognise that a particular competence may extend across several departments and cannot be isolated and adjusted.
- **Growth.** Competencies are the “roots” of competitiveness [27] . A good product is built on effective competencies. Nurturing competencies will ensure competitiveness of a company more than that of any individual product range produced by that company. Far-sighted companies compete for access to the individual skills and technologies that comprise a core competence.

Hamel [27] argues that companies should seek to control core competencies that make the biggest contribution to customer value. A new angle has also been introduced namely that of core competence and hence it is critical to determine *when Competencies become ‘core’?*

As described above, a competence is a bundle of skills. The term bundle is used in reference to the skills held across a company. Typically there would be about 50 skills and these would then be grouped together in bundles. The competencies may not vary significantly in quality or quantity from that of a competitor. In this sense, it becomes important to differentiate between those competencies that have the highest potential in meeting profitability. Competencies that have the highest potential are known as core competencies and have the characteristics described in the following section.

- **Customer Value.** The distinction between core and non-core competencies depends on customer perceived value. The benefits that a customer sees in a product determines purchasing patterns. These benefits are divided into core benefits, which are central to the decision to purchase, and non-core benefits that are nice to have but are not central to purchasing decisions. Hamel [27] gives the example of Honda’s know-how in engines as a core competence and it’s management of dealerships as a non-core competence. Both are competencies but dealership management is not regarded as core because it does not constitute a core customer benefit. Honda does not advertise that its dealership network is better than that of any of its competitors. Rather, advertising is geared towards what is regarded as a core customer benefit, which in this case is fuel efficient, powerful engines – engine



know-how.

- **Competitor Differentiation.** Some competencies may not vary significantly amongst competitors. The group of skills that contribute to a particular competency may be very similar and in this sense the competency is necessary but not differentiating. A core competency must be competitively unique in order to be classified as core. E.g. the Audi drive train.
- **Extendibility.** Hamel [27] argues that a competence is not product related but is primarily people related. It comprises the skills necessary in order to produce a product. A competency can be regarded as core if it is possible to extend that competency to new products and/or service. This means that a core competency could be used to imagine new products or new methods of doing a particular task. These new methods would then contribute to the competitor differentiation concept mentioned in the previous paragraph.

In the above discussion, skills and competencies have been discussed and differing perspectives on these concepts have been considered. For the purposes of this report, it is necessary to define how these terms will be used from this point onwards.

**Skill:** A skill is practiced ability. It will be used when referring to the ability of an individual to perform a task or set of tasks (as defined at the beginning of Chapter 3).

**Competence:** A competence is a bundle of skills. The word competence will be used when referring to both individuals and to the company. The definition provided in the Skills Development Act provides for this latitude. Competence of an individual in a skill depends on the three factors described in the definition of "competence of skill" in the previous section. In the area of functional ability, competence will be used to refer to an individual's skill within the context of the company. Hence the relationship of that skill to broader company goals is taken into account. Core competence has three defining characteristics described above and will be used when referring to the company competencies.

Current management trends in the field of skills development clearly point to the fact that skill development needs to be approached from a broader perspective, namely that of competence. Within the context of this project, competencies themselves are not the primary focus but rather the development of competencies. A question that I began to ask at this stage is whether the development of competence can be approached broadly? An analogy to this would be, generally speaking, that if a skill is lacking, training in that skill is usually regarded as the first avenue of intervention. Can the same approach be used for competence? i.e. are there general underlying factors which underpin the development of competencies?

### **Training and Competence Development**

As highlighted in the previous section, increased competitiveness requires that, amongst other things, the right competencies be acquired and developed. Before this stage is reached, it is important to recognise what competencies are available and how these contribute to the current business idea of a company. It is equally important that an understanding of the strategic objectives of the company is also reached. Improved performance requires that employees understand what skills and competency profiles exist and how these profiles relate to the overall objectives of the company. On an individual basis, it also requires that an employee understands where the skills that they possess fit into the overall picture i.e. how these skills contribute to departmental and company goals. Skills and competence profiles are not only an internal tool to support the business idea but also function to empower employee as evidenced in the earlier part of this

report (see Table 5 and system Meta language).

Career development of employees is part of the empowerment process but, as the Training Manager believes, "it should ideally be aligned with the skills and competence profiles". Development can become an ad hoc action if it is not derived from and focussed towards the profiles. This scenario is typically demonstrated in a department where training budgets are left as the last line items, the scraps that remain after the "important" items have been allocated a budget. Training, when viewed in the light of competence development, requires that as a skills profile is drawn up and it is matched to a solid training plan.

Training programmes are an essential feature of many companies. Analysis of US firms has shown that [38]:

- Industrial corporations spend about \$40 billion a year on training programmes for managers and executives.
- Annual training programmes involve 15 billion work hours.
- The total number of individuals who receive formal, employer-sponsored training annually is about 39.5 million.

Training is becoming all the more important in increasing competitiveness. Some reasons for this are:

- It is difficult to implement new technology successfully without training.
- The value added by proper training and the losses incurred by inadequate training are too high to be ignored.
- The net value of training increases with wider dissemination throughout the organization [38].

Skills development requires that training be focussed towards various goals including that of the individual and also broader company objectives. In the South African context, the Skills Development Act provides financial "incentives" for training that is directed towards certain skill levels e.g. Adult Basic Educational Training. In order for effective training to take place, an evaluation of current skills is required.

In any evaluation process, measurement is needed. It is well accepted that what one can't measure becomes all the more difficult to manage. Measurement creates the basis for comparing performance from past to present and between different individuals, teams and companies. It must also be recognised that the adoption of the wrong measures and wrong measurement system may adversely affect future performance. Also central to evaluation is an understanding of the terms of reference. In this case, a definition of a skill is required before that particular skill can be evaluated. Many practitioners in this area recommended the use of generic definitions that can be translated to different arenas [39]- see also Glossary. I have chosen to use the term operational definition in this respect and this is discussed in the next section.

#### **4.6.2. Operational Definitions.**

Operational definitions are a step towards establishing a "common sense" approach to evaluation. Once an operational term or phrase has been clearly defined, on paper, the ambiguity involved in discussions using the term is reduced. For example, a foreman will instruct an employee to "take the box to the warehouse". To the experienced employee this may mean not only taking transporting the item to the warehouse but also booking into stock etc. To a new employee, the same instruction ("take the box to the warehouse") may mean just to transport the item to the warehouse and leave it there, returning with no paper work. This type miscommunication (and frustration) can be avoided by clearing up meaning of phrases and words that are used in an operational context. This is what the operational definition is designed to achieve.

The purpose of an operational definition is to increase clarity and stability. In this manner, the operational words in use become “common” i.e. all who use the word are using it with a similar understanding of the meaning of the words. In this manner, operational definitions contribute towards enhancing meaning within an organisation. Kerridge [40] asserts that giving ideas and concepts operational meaning is an important tool for continual improvement making learning and communication much easier [40]. He does however note that there is no right definition and that the definition must be fit for a particular purpose. The skills definitions provided in the Glossary (see second page), are by way of example and mention is made that skill definitions require organisational fit. Skill definitions as the basis for evaluation will form an important part of the initial phase of the Skills Consultative Forum (discussed further on).

The above research is seen as part of the emergent design process of QR. A new picture of Skills Development is emerging because of widening perspectives on the issue provided by those whom I interacted with (co-workers, colleagues etc) and the literature surveys conducted. In the literature search, the term learning organisation became evident as part of any serious research into skills development and hence a description of this phenomena is included below. A key question in this regard is how individual skills development is related to organisational development?

#### **4.6.3. Learning Organisations**

Organisational life currently features increasing diversity, global competitiveness, the constant need to do ‘more with less’ and above all change. In such an environment, the rate at which an organisation can acquire knowledge and translate this knowledge into products is becoming a hallmark of many successful organisations. Fast learners find ways to improve products and process and hence make earlier breakthroughs in the market than their slower learning competitors. Organisational learning, a concept that promotes continuous adaptation and improvement captured the imagination of many managers in the previous decade. **A learning organisation is an organisation skilled at creating, acquiring and transferring knowledge and at modifying its behaviour to reflect the new knowledge [4].**

Organisational learning occurs when individuals within an organisation experiences a problematic situation and inquire into it on the organisations behalf. They experience a surprising mismatch between expected and actual results of action and respond to that mismatch through a process of research (used in the broadest sense) and further action that leads them to modify their mental images of the organisation or their understandings of organisational phenomena and to restructure their activities so as to bring outcomes and expectations into line, thereby changing the organisational theory in-use. In order to become organisational, the learning that results from organisational inquiry must become embedded in the images of organisation held in its members’ minds and/or in the epistemological artefacts (the mental maps, models and programs) embedded in the organisational environment [41].

#### **Characteristics of a Learning Organisation**

The following managerial practices are key conditions essential for learning to take place and contribute towards building a learning organisation.

##### **Clarity of Purpose and Mission**

The organisation as a whole and each business unit comprising the organisation need to have a clearly

articulated vision and mission. Senge [4] has stated that 'building a shared vision' especially of a desired future state creates the tension required for learning.

### **Culture.**

Problems faced by organisations present opportunities for experimentation. The organisational culture should support this practice. Individuals and teams need to be provided with the freedom to experiment and test different options and not be burdened by a climate of witch hunting and fingerprinting, which is the antithesis of a learning organisation. Teamwork is essential in this type of culture.

### **Teamwork and Group Problem Solving.**

Structures and systems in the organisation need to encourage teamwork and group problem solving and reduce the dependency on upper management. Teams need to be formed and then nurtured and thus leadership and support from upper management is essential.

### **Leadership.**

Virtually all writers mention leadership as an important element in fostering a learning climate. The role of leaders in the organisation, with respect to helping employees learn and elicit behaviours (mimicry) that are consistent with an experimenting and flexible culture, are mentioned above. Leaders need to be committed to the accomplishment of the organisational mission and to the goal of learning. Managers also need to be adept at exposing hidden assumptions (their own as well as those of their employees) in the process of building shared visions. Integral to the process of shared visions is the balance between inquiry and advocacy. Many managers are skilled at eloquently putting their cases forward and often (see Senge [4]) this leads to a defensive approach. Leaders in learning organisations need to have both inquiry and advocacy skills. Senge recommends that the following is necessary when advocating a point of view:

- Explaining the reasoning and data that leads to others expanding their viewpoint
- Encouraging others to test the viewpoints
- Encouraging other to provide different view points

This should be balanced with inquiry skills by:

- Actively seeking to understand others views, rather than simply restating their own or with a view to merely winning the argument.
- Making their assumptions about the others viewpoints, explicit (when you say that, I'm assuming...)

### **Transfer of Knowledge**

Communication must be open, clear, honest and focussed. Relationship building starts with communication and the element of trust is essential in this process. The majority of writers agree that communication in a learning organisation is characterised by a willingness to share and not hoard information. Transfer of knowledge can manifest in various forms including intra-departmental transfers, a mentoring system where the know how of senior staff members is passed on to junior staff members via a formal mentorship system.

This chapter began with a description of the context of the research project. The skills development legislation was described and it's possible impact on the organisation was explored. The area of focus for this project is the implementation of skills development, within the paradigm set by the new legislation. The

organisation that I work for was then described and the business idea of the organisation, as seen by various stakeholders in the business, was explored. The first phase of the project involved the implementation of a skills and training database for the Training Manager at the organisation, and this was the initial field of focus for the project. Qualitative research is emergent in nature and this means that in the course of the research, meaning expands and within the expansion, the research can then be refocused. In the previous section, I argued that skills development needs to form part of a broader developmental approach. Skills should not be seen in isolation but rather as part of competencies, which are packets of skills. Organisational development should focus primarily on the development of competence, as the foundation of skills development. The relationship between individual training and organisational development was also described and I view this relationship as one that is characterised by that found within a learning organisation. Hence the focus of the project, as initially conceived, had shifted in the light of new research into the topic and this necessitated a review of both the Training database and my own assumptions about skills development using the database.

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#### 4.7. Refining The Training Database

The above research into competency and learning prompted me to revisit the Training Database. The database, as supplied to the Training Manager, had more capability than initially conceived. Skills profiles were being inputted into the database and training plans were being developed, but the danger lay in the possibility that these processes were being done in isolation. This could lead to a mechanistic approach to skills development where skills are developed in isolation and without reference to the bigger picture. The Training database provided the opportunity of instant access to a portion of the bigger picture. This portion of the bigger picture was the *packets of skills* (i.e. *competencies* - see previous section) held at the organisation. The question that I had in mind at this stage was: are there indeed packets of skills, based on the results that the training manager had compiled at that stage of the project? The relational powers of the database were put to test and the results are shown on the following pages. The first table shows a skills profile for the entire company.

##### The Overall Skill Ratings Table.

The results from this table are a compilation of the skills profiles currently on the system. Approximately 30 employees have been assessed and the **results** of these assessments have been inputted into the database. It must be noted that the database is not being used as a skills assessment tool but rather to capture the outcomes of a particular type of skills assessment process. The table shows what the most **widely held** skills in the company are. Thus the results present a view of the competencies (i.e. potential packets of skills) of a company as measured by aggregate skills profiles i.e. the average for a skills weighted over all staff members who hold that skill. It should be noted from the above research into competencies [37], that a competence is a collection of skills and thus the information in this table has the potential to determine competencies. The definitions of the skills are available as part of the skills assessment process (some of which are given in the glossary) and are not relevant to the discussion at this stage. What is important for me is to understand how competencies are recognised with a view to developing these competencies. Training is one method of developing competencies and the overall training plan for the company is presented in the next table.

##### Popular Courses (Top 20).

This table shows a summary of all training courses that are planned for individuals for the period indicated (2000 to 2001). The main use of this table is to show the overall direction of training for the selected period. The table shows that the Customer Service course will have the most attendees and the Sales Conference course will consume the largest portion of the training spend. I felt that it was important at this stage not to be drawn in to the specifics of the information presented in this table (such as which course is top's etc) but rather to recognise that the table presents a **view of what direction** training is expected to take the company. This in turn would give a view of how competencies would develop. The training that takes place today will contribute towards tomorrow's core competencies and thus individual training plans should be aligned to the overall training direction wherever possible. Thus the primary purpose of this table is to give an indication of the **trend** in training and should be read in conjunction with the overall skills rating table discussed above. An individual manager can thus compile a training plan for an individual and at the same time be aware of the broader training picture.

## **Overall Skills Ratings (Top 20)**

*From 2000 to 2004*

### *Training Department*

<i>Skill</i>	<i>Employees</i>	<i>Weighted average (%)</i>
Understand total company	25	71.4
CUSTOMER SERVICE	20	68.7
INITIATIVE	16	62.8
INCREASE GP%	15	57.2
COMPANY IMAGE	14	64.1
Plan	13	59.7
NEGOTIATES	12	63.7
Delegate	12	57.4
PROBLEM SOLVING	11	60.1
Compile report	10	75.1
MANAGES FUNCTION	10	71.5
WRITE A SPECIFICATION	10	68.9
WORKS INDEPENDENTLY	10	66.4
CUSTOMER RELATIONS	10	35.9
MERCHANDISE	10	35.8
SYSTEMS KNOWLEDGE	7	73.7
Transfer information	7	71.4
TEAM PLAYER	6	63.2
Lead team	5	49.4
DEVELOPS	4	58.6

*Compiled by Phillip Twynam*

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**TABLE 6: Towards Competence - A report showing the overall Skills Profile for the Organisation**



## **Popular Courses (Top 20)**

*From 2000 to 2004*

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*Training Department*

<i>Course</i>	<i>No of Attendees</i>	<i>Overall Cost</i>
Customer service	122	R 103,700
SALES CONFERENCE	97	R 339,500
Communications	61	R 122,000
CUSTOMER CARE	46	R 46,000
CQIP	37	R 3,700
EXCEL (B)	35	R 17,500
Leadership	34	R 68,000
WORD (B)	34	R 34,000
TIME MANAGEMENT	33	R 26,400
JOB SPECIFIC	30	R 24,000
Assessment - PIB	29	R 14,500
SDP	28	R 117,600
SAPMA	25	R 55,575
INDUSTRIAL RELATIONS	25	R 25,000
ABET 5	24	R 33,600
PERFORMANCE MANAGEMENT	21	R 17,850
BASIC FINANCE	18	R 18,000
OHSAct	17	R 4,250
Finance	16	R 80,000
Advanced communications	16	R 32,000

*Report Total*

**R 1,183,175**

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*Compiled by Phillip Twynam  
Friday, October 26, 2001*

*Page 1 of 1*

**TABLE 7: Overall training plan - A report showing the training profile for the Organisation**

#### **4.8. The Skills Consultative Forum (SCF)**

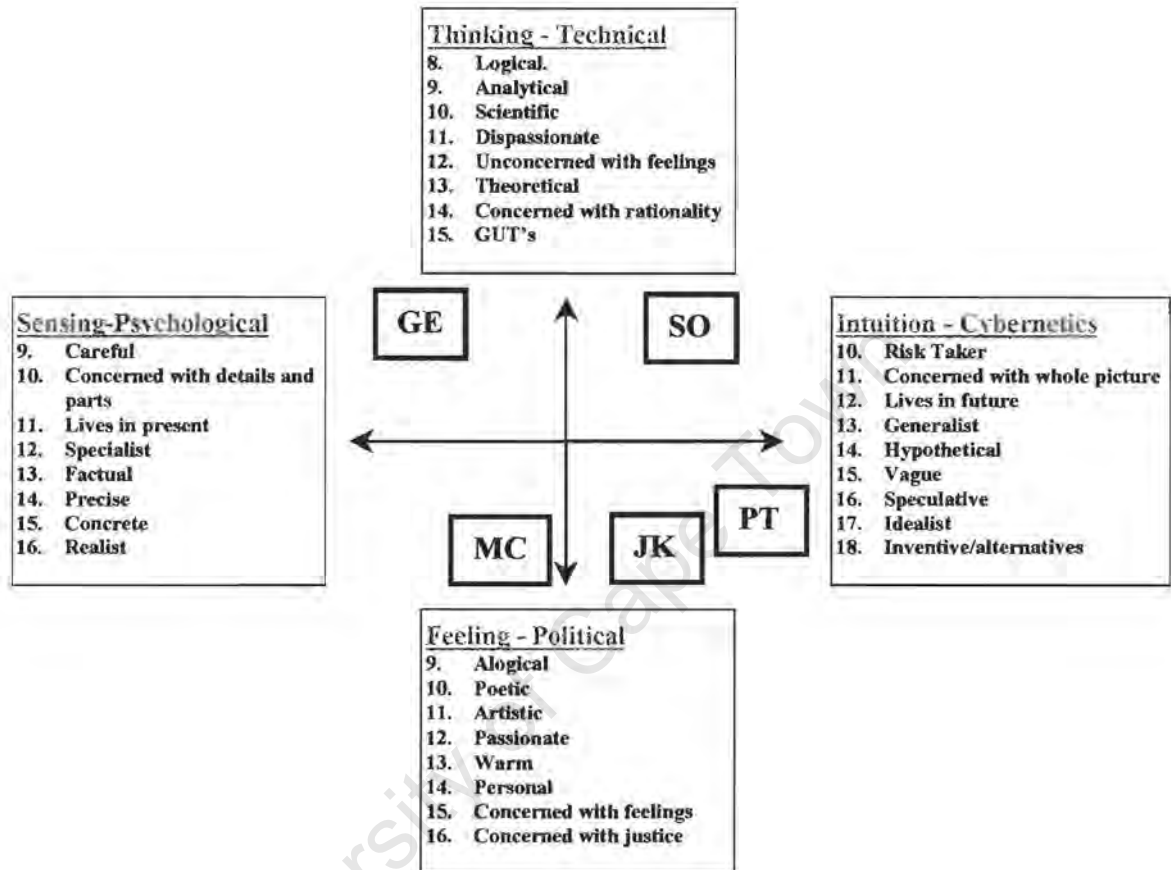
With the introduction of Employment Equity (EE) legislation, a forum was set up to deal with the issues and EE was also stated as one of the strategic objectives of the company. The EE Act and the Skills Development legislation are related in many ways and this led to the introduction of a Skills Consultative forum(SCF). This forum was formed in July 2000 in order to provide an integrated approach to Skills development at the company. The forum comprised various stakeholders that were identified by the Employment Equity Committee on site. The forum was chaired by the Training Manager. Table 6 below lists the stakeholder representatives together with the group of staff members that the representative reports to.

<b>Representative – initials</b>	<b>Stakeholder Group</b>	<b>Main Reason for inclusion</b>
Training Manager (Chairman) – Phillip Twynam (PT)	Local Management, Group (Head Office)	HR, Training competence
Union Representative – James Koopman (JK)	Unionised workers	Co-determination (see figure 15)
Non-union rep – Aziz Mohamed (AM)	Non union workers	Co-determination
Sales rep- Gaynor Eckardt (GE)	Sales and distribution	Co-determination
Project Manager (the Author) - Steve Osborne (SO)	Local Management	Technical (database)

**Table 8: Skills Consultative Forum – Stakeholder Representatives**

It should be noted that all of the above representatives were already elective members of the Employment Equity committee at the company and thus stakeholder representation by the above members was assumed to be automatic, by the Phillip, the Chairman of both forums.

In terms of multiple perspectives, as discussed in the introduction, the various SCF team members brought differing perspectives and personality types to the forum. This is summarised below. The initials of each team member (see previous table) have been superimposed onto the Jungian Dimensions (figure 6).



**Figure 28: The Jungian Dimensions applied to members of the SCF.**

The objective of forming the SCF was to ensure that any development of skills would take place within the framework of the Employment Equity Act (see next section and appendix H for an overview). The mission and vision of the Skills Consultative forum were discussed at various meetings and the outcome was formalised as:

**Mission:** to ensure equitable development of the Epping workforce.

**Vision:** to adhere to the numeric goals as set out by the Employment Equity Act as applied to the whole

company.

The minutes of the SCF meetings are presented in appendix N. The documents relevant to the forum are presented in Appendix B and cover topics such as the compilation of the workplace skills plan (the primary output of the SCF) and the identification of HR systems that are affected by the Skills Development Act. In order to develop the workplace skills plan, job profiling must be undertaken and the work undertaken by the SCF for the remainder of 2000 focussed on these profiles. An interview process was used to draw up the job profiles and was conducted in the following manner:

- The interviewee was selected by the Training Manager in consultation with the Head of Department.
- The interviewee was invited to the SCF meeting
- At the meeting, brainstorming was undertaken during which various aspects of the interviewees job were questioned in an open manner i.e. ideas were placed on a storyboard and these were then discussed and questioned. Typical issues that were explored were: who are the customers of the Telesales department? Or what performance measures are currently in place?
- After the interview, the job profile was drafted by the Training Manager and presented to the SCF for finalisation.

Samples of the results of this profiling process are presented in Appendix G. An important task for the SCF was to implement skills development within the framework of employment equity. The training database provided another opportunity to evaluate the development of skills in this respect. I modified the database to incorporate Employment equity reports, such as training spend and skills development on previously disadvantaged groups. These results are also given in appendix G. At this stage of the project, the focus of the research was shifting towards competence and hence the results of the training database, with respect to employment equity, are discussed in appendix G.

#### 4.9. Towards Competence

The discussions in the Skills consultative forum also exposed the fact that the work of the forum needed to be sold, particularly to the managers on site. This was required because any real progress in skills development on site required the commitment of the managers. Certain managers had also expressed concern about the fact that they were not fully aware of the job profiling process mentioned in the previous section. I presented the Training database output, as described by the graphs included in the earlier part of this report (see also Appendix A), to the managers as part a process to begin a dialog with them on skills development and competence. A brainstorming session was then held in the boardroom to discuss these issues. The Quality, Training, HR, Risk, Operations, Production, Warehouse, Raw Materials, Stock and Sales managers were present. The topic decided by the group was:

##### What are the issues relating to competence?

The basic process used in the session was:

- Idea generation on comment sheets (The results of this session are presented in Appendix I) – here the managers wrote down comments about skills development and were then given a chance to comment, in writing, on others' viewpoints.
- The managers were then given the opportunity to review their comment sheets and these were then compiled onto postit stickers.
- The ideas on the postit sticker were then grouped into headings (see appendix I)
- An interrelationship diagram was then generated via a process of discussing the driver/outcomes of these issues affecting competence (the topic of the session)

This process had previously been used at the company order to start a dialog on continuous improvement, the results of which are presented in the Change Management section of this report Fig 15 (see also Appendix M). The group idea generation session (pt. A above) was used as a method of conducting a **group interview** with the managers in the company. The interrelationship diagram for competency development is presented below in the form of a causal loop diagram. The step from the interrelationship diagram to the causal loop diagram needs to be discussed briefly. The interrelationship diagram was generated by the managers and is thus a reflection of the common agreement that was reach on the issues discussed at the brainstorming session. Once this had been done, I then reviewed the diagram and redrew it in the form of a causal loop diagram (CLD), which is discussed below. The central theme of the CLD was seen by the group as Strategic Goals. These strategic goals are central to the development of the right competencies. The goals the drive Performance measures, reward systems and training as shown below.



**Figure 29: Strategic Goals as the Central Driver.**

As the definitions that the group reached indicate (appendix I), Strategic goals drive reward systems directly in, say, the case of incentives and also indirectly, through performance measurements. The same applied to training i.e. it was seen by the group to be driven directly by strategic goals and also indirectly through performance measurements. Performance measurements were seen to drive both reward systems and training. This means that, as far as competence development is concerned, performance measurement and analysis is expected to highlight areas of training and development that need focus. Training is also driven directly by the strategic goals because the strategic goals (as far as competence is concerned) set the parameters within which training and development policy is formulated. I wish to note at this point that this is a summary of the group debate and the general logic that was followed in the discussion. My role in this debate was one of facilitation and hence I did not strive to participate actively in the debate but rather to stimulate and direct it. From the QR perspective, it is also important to note that the above diagram is generated by a group of individuals and may not be applicable to another group. I saw QR as pointing the way to a more in-depth focus on competence development and the above diagram was used as such i.e. to uncover the meanings and word used by the individuals in the later stages of the project.

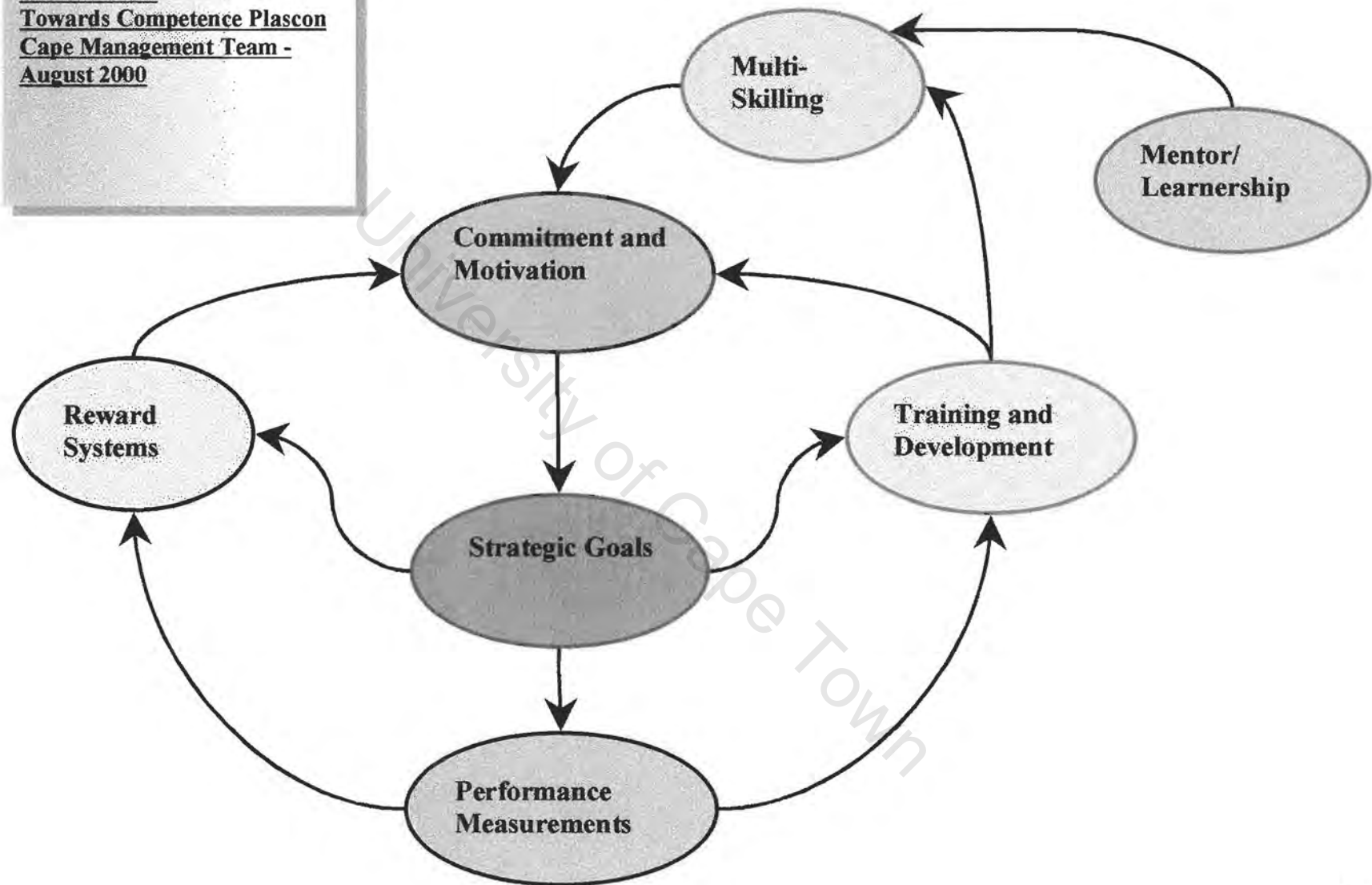
The other central theme of the debate was that of commitment and motivation. Reward systems, Training and Multi-Skilling (a type of training) were seen by the group to be the drivers of commitment (towards competence development). This is shown below.



**Figure 30: Drivers of Commitment and Motivation (as seen by the group).**

Strategy and commitment were thus seen (by the managers) as central themes in the competence development debate. These two themes and their drivers are shown in combination on the following page. From the QR perspective, it is important to note that the CLD is relative to the views of those present at the session and is dependant on their perspectives. Hence it should not be viewed as absolute because adaptation in the approach of the managers to issue of competence (or any other issue) is part of the business idea at the site (discussed earlier). Individual definitions of the terms was not undertaken as it was decided by the team to use the various sentences places under each title as definitions, as shown in Appendix I. This was possible because most discrepancies were resolved during the debate that followed the brainstorming session. The full model for competence development is shown on the following page.

**FIGURE 31:**  
**Towards Competence Plascon**  
**Cape Management Team -**  
**August 2000**





An exciting outcome for the SCF members at the session was the Mentorship node shown at the top right of the CLD. Mentorship appeared clearly as an issue that affects competence and during the debate it emerged as a driver for the multi-Skilling process currently underway at the company. The issue of what drives mentorship was discussed but no resolution was reached in the meeting and thus it is left hanging from the side of the CLD. From the systems perspective, the fact multi-Skilling node is hanging loose is indicative of two main factors:

- Due to a lack of experience with mentoring (there are no such system in place at the company) the participants at the meeting were unable to decide on the drivers (i.e. the inputs) of the Mentoring node shown on the CLD. This was observed during the session where participants were unable to provide any concrete ideas on the topic and certain individuals "glossed over it".
- A loose node often indicates a point of intervention and the CLD indicates that mentoring is a possible intervention that can be instituted in order to increase competencies in site.

The relationship between the motivation and the strategy nodes can be summarised by asking can be achieved or even conceived by unmotivated people. The answer to this was generally taken to be no (from *informal interviews* after figure 31 was presented) and hence motivation was seen as driving strategy. Due to time constraints this link was not fully explored at the session and was left to later interviews with the participants. It was important to be aware of any differences between the group generated results and the adaptations made by the author. There was the only one main addition and that was the linking of the commitment node to the strategy node. This was done by with a view to later verification via the interview process. During this process, some of the managers who participated in the building of the CLD were interviewed about their approach to competence. These results are presented in Appendix D. Three interviews were conducted with managers who were present at the brainstorming session discussed above and the CLD formed part of the interview process.

The following observations were made based on the interviews:

- The role and potential of the SCF was still not fully understood
- The competence model was accepted as an accurate reflection of the management team meeting but there was indecision about what actual competencies in certain departments were and how these were to be aligned with group strategy. The interview process confirmed the link between motivation and strategy. Although group strategy was known (discussed further on) and the need to focus on company goals was expressed, the linking of strategy to departmental objectives was not entirely clear.
- There is definite buy in to the concept of mentorship which bodes well for any further interventions as far as skills development is concerned because mentorship's and learner ships are an integral part of the Act. It is important to note that this buy-in evolved naturally at the management sessions i.e. it was not sold but rather it developed after critical reflection and debate by all managers at team sessions, facilitated by myself.
- There is a definite weakness in the area of performance measurement. This presents a definite weakness in the management capacity because the role of performance measurements in competence development is clearly shown (as agreed by the managers) in figure 31. Further interviews (discussed later) highlighted this concern.
- The preferred methods of training was "*on the job*".

- The job profiling process was seen as important and "*long overdue*".
- The policy of "*driving HR down the line*" (interview with I Knight-MD) was accepted but the interviewees had different methods of interpreting this "policy". The word policy has been placed in inverted commas because there is no concrete statement to define this objective. There is definite need to concretise this policy by defining it more accurately and training in this area. This is discussed further in the following Chapter - the Reflection.
- A strong emphasis was placed on the role of HR within the organisation. This is probably due to the HR background of the interviewees.
- The organisation has a patriarchal tendency, which seems to put a damper on managerial initiative in certain areas. I would like to note that this seemed strange to me as leadership did not emerge as a factor in the competence debate discussed above. I discuss this in the following chapter.
- Phillip, the Training manager, stated that he "*believed that a middle ground was required between the hard systems approach and the soft systems approach*". This belief was echoed by the Ian (MD) with the statement that "*we need to be hard on systems and soft on people*". This demonstrated to me that these stakeholders had a systems approach to problems in the organisation, probably stemming from previous intervention that I had done with them. It also indicated, once again the HR background that these managers had which was now playing a further role in their current positions.

Interview and reflection on the cybernetics of the training and development system (fig. 25) also revealed that my attempts to distribute the database, with a view to allowing managers to develop their own training plans could possibly be a violation of the law of requisite variety. Most managers (according to the Phillip - the training manager) were not sufficiently skilled in the field of training and development and would either resist or be unable to develop their own training plans and skills profiles. Only once the role of the training manager and line manager with respect to the development of skills profiles and training plans had been sufficiently clarified and the line managers had been trained in both skills assessment (training needs analysis) and the use of the database, would the law of requisite variety not be in violation. With this in mind, I decided that, although the concept of line managers developing their own skills and training plans on the intranet would be premature, some benefit could still be derived by increasing the amount of feedback in the system. The second Cybernetic law states that in any system output is dominated by feedback and, within wide variation, input is irrelevant. Line managers could still derive much benefit from the database by being given read only access to the plans and profiles that were being compiled by the training manager. Two main benefits of the database are instant access to the plans and also the totalisation of skills and training profiles for the entire company (table 6 and 7). These totalisations give broad overviews of the skills held within the company and the training direction of the company and as such provide important indicators of the overall direction of competence within the organisation. Thus, providing managers access to this information is an opportunity to improve the cybernetics within the organisation by providing an avenue to increase feedback within the system and hopefully also to enhance the training and development dialog within the company. Hence the database remains primarily the domain of the "experts" i.e. Myself and the training and development manager, but the database is web enabled thus giving all staff (read only) access to the information with a view to stimulating the competence dialog within the organisation. This is explained further in the following sections.

#### **4.10. From Skills to Strategy**

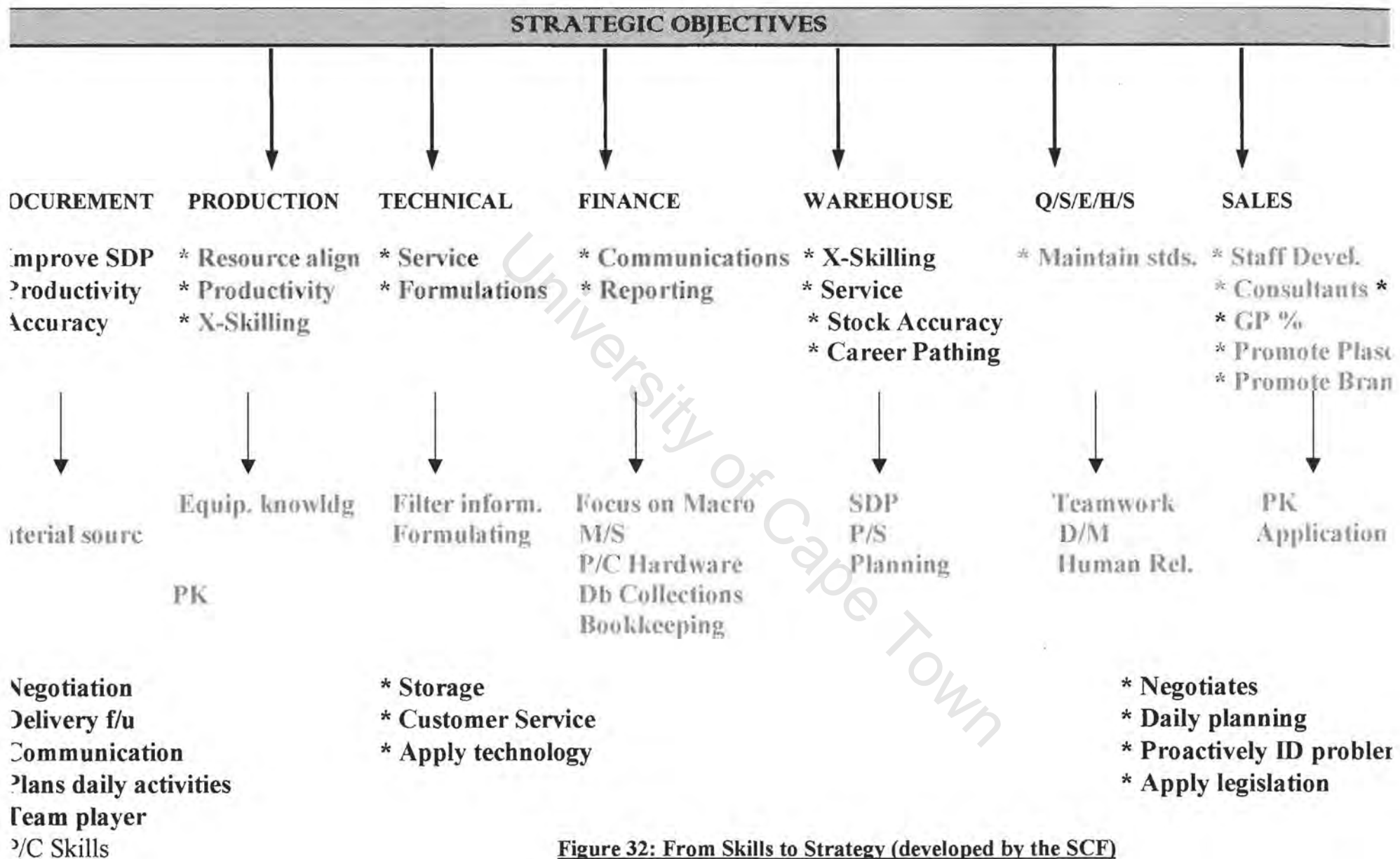
In August 2000, the Group Training Manager, Mzi Gaga, visited the local Cape company and gave various presentations about Training and Development. These meetings took place after the session in which the Competence Causal Loop Diagram (CLD) was generated. His presentations are presented in Appendix N.

He stressed “*it is important to align the work of the SCF (Skills Consultative Forum) with the strategic objectives of the company*” (see also Appendix D). This relationship had already been examined by the management team, as shown in figure 31. The strategic objective of the Group were presented by Miz as:

- i. CFROI (Cash Flow Return on Investment = 8%)
- ii. Employment Equity
- iii. Productivity Improvements
- iv. World Class Quality

He also spend a considerable time discussing performance measurement and this, it was agreed, was an essential area where development is required.

The alignment of the Group strategic objectives as shown above with the strategic objectives of the various departments was undertaken by the SCF. This process was essentially one of consultation with the departmental managers. The preliminary results are presented on the following page. The four strategic objectives of the group are listed at the top of the page and these then filter down to the strategic objectives for the individual departments. The results shown in figure 32 are preliminary and are likely to evolve in the normal course of business but for the purposes of this discussion, figure 32 represents the alignment of departmental objectives to company objectives and, within this framework, skills assessment and development could take place. This was the recommendation of the Group Training manager and concurred with the CLD (figure 31) developed by the management team. Hence figures 31 and 32 represent the foundations for skills development at the company, as developed by the managers.



**Figure 32: From Skills to Strategy (developed by the SCF)**

#### **4.11. Developments Relating to the Skills Consultative Forum.**

Two main developments took place towards the end of the project, which had a large impact on the work of the Skills Consultative Forum, as described below. These factors had an impact on the Skills/Competence development process and hence are briefly described below before the start of the final chapter of this report - my reflection on these results.

##### **4.11.1. Activity Based Costing (ABC).**

I was co-opted onto a nationwide team to begin this process at the company in August 2000. I currently represent the Cape region on the ABC steering committee. It is not the intention here to describe the ABC process but rather to locate the points where ABC and the Skills Development process can compliment one another. A brief description of Activity Based costing is given in Appendix Q.

The ABC project had a definite relationship to the Skills Development work in that ABC has a definition process, as it's starting point. An Activity Dictionary is created and thereafter work-study on the activities begins. I observed that activities were often very closely related to the Skills that were defined as part of the Job profiling work of the Skills Forum (see also the section on Operational definitions 3.6.2). Job profiles are drawn up via an interview process and the same happens with the activity list that forms the basis for the ABC calculations i.e. staff members are interviewed in order to determine which activities are relevant to their jobs and these are quantified. Due to the above considerations, HR representatives were invited to join the Abc committee at a head office level.

The potential synergies between these two initiatives were not discussed in any depth and at the time of writing (December), and I took the step of web enabling the Training Database and the Activity Based costing databases and then distributing the results out for comment. This was the last step of this research project. This was also done with a view to improving the cybernetics within the organisation (feedback) as discussed in the previous section.

When a user accesses the Training database on the company Intranet, an option is available to switch directly to the Activity Based Costing web site in order to view the activity list for that individual. This is shown by the screen shot below.

# Staff Details



## Training and Development Database

Select a Name and click search

Search

Skills Profile

Training Plan


ABC Activities

- EmployeeName: OSBORNE, SW
- Job Title: PROJECT ENGINEER
- Department: 121-19
- Phone: 301
- Cell:
- Birthday:
- Title:
- EmployeeID: 34085
- Full Department Name: Research and Development
- Grade: D1
- Union Member: False
- Unionname:
- Designated: False

**Figure 33: Training and Development on the Intranet**

My details are shown in the above screen shot of the Internet Explorer screen. My skills profile of Training plan is accessible from the links as shown as shown below the search field. The “ABC Activities” link on the right will switch to the following screen, which reads data particular to that individual from the Activity, Based costing intranet site (the databases on this site).

# Activity Allocations



Select a Cost centre below or click [here](#) for a list of centres. Click [here](#) to open a separate copy of the activity dictionary or click the activity code below for a quick lookup. Training Plans are also available by clicking on an employee name below.

Cost Center

Employee

Employee Name	Cost Center	Job code	Activity Code	ActivityPercent	Employee ID
OSBORNE SW	3B55	PROJECT ENGINEER	PM04	40.0	34085
OSBORNE SW	3B55	PROJECT ENGINEER	EA05	30.0	34085
OSBORNE SW	3B55	PROJECT ENGINEER	BI06	30.0	34085

Last modified: December 02, 2000

**Figure 34: Activity Based Costing on the Intranet**

The above links were created in order to assist managers the development of training plans. Managers on site now have the ability to query and alter the Activity Based costing information and at the same time alter individual training plans to suit the Activity profiles for staff members. The Activity allocation shown above is used to view the percentage activity comprising each individual's job. Clicking on an employees name will link directly with the training database and take the user to the employee details as shown in figure 33. Training plans and Skills profiles can then be accessed from these databases. The links between the two databases also allows those with access to the web sites to keep up to date with developments "on both fronts".

The above links were distributed to the Accounts and Training managers for comment. The local training manger was concerned with the confidentiality aspect of certain details on the Training database web site but on the whole agreed with the concept. Comments from other managers have not been received as at the time of writing (12 Dec).

#### **4.11.2. The Export Initiative.**

At the beginning of October 2000 a restructuring initiative started at the company. At the heart of the effort was the revised strategy of making the Cape Town factory the Export centre for the entire Plascon group of companies. Exports would initially be taking place to Britain, West African countries and China. Together with this strategy came a plan to restructure the workforce accordingly. The restructuring notice is given in appendix P and basically comprises the relocation of certain production to other manufacturing centres in the country in order to accommodate export volumes in the Cape



Factory. An engineering upgrade was also put forward by myself, the main motivation of which would be the upgrade of the factory to international standards (ISO 14000 etc).

The Export initiative placed a damper on the Skills development initiative in that a large amount of uncertainty was introduced into the company. The plans to retrench a certain number of employees also did not bode well for the level of moral on the site. There was general agreement that the Skills forum would be able to resume work in the new year once the restructuring effort and the retrenchments had taken place.

#### **4.12 Summary**

In this chapter I have described the intervention. The background to the research was described and the initial project plan (table 10) and objectives of the project were given. The organisation where the research took place was then described and this was followed by detailed descriptions of the three cycles of action research, as applied in this project. The emergent design feature of Qualitative research allowed for the level of abstraction of the research topic to be raised from skills development, as initially conceived, to competence, to the nurturing of competencies and this was elaborated on in this chapter. The evolving context within the organisation was also described with the introduction of Activity based costing, web-based training plans and a plan to restructure the organisation. The following chapter is a reflection and evaluation of the major themes of this project and the research cycles that took place.

## **Chapter 5: Reflection and Evaluation**

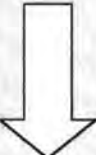



Reflection and evaluation completes the learning cycle and is also the basis for developing action plans for future interventions with a view to perpetuating my learning cycle (see figure 9) and further improving the organisational situation into the future.

This research project began with a request to develop a Training database for an (internal) customer and this was delivered. The database has been described in the previous section and, in essence, enables the customer to compile training plans in conjunction with skills profiles. These training plans are developed, using the database, in accordance with the requirements of the Skills development Act. The project followed a three-phase process as described in the following table. The first phase of the project lasted for about four months and in this phase the aforementioned database was developed for the customer. The second cycle was essentially one of expanding options (problem formulation) and exploring the research subject in greater detail using a qualitative research approach, with a view to designing an effective intervention. Table 11 on the following page shows the three cycles including the typical questions that were asked at the reflection stage of each cycle. The theory building part of each cycle is shown and is important from the point of view that theory building is an essential part of the learning process. Each project cycle ended with an implementation/action stage. Many learning theorists argue that knowledge can only be claimed upon showing results (Deming) and this philosophy is integral to the action learning sequences as described by the cyclical learning process in table 11. These results are discussed below.

### **5.1 Results**

The primary result of the first cycle of the project was the Skills Profile \Training plan as shown in Table 5. This outcome was specifically requested as part of this phase of the project. The Skills Profile and Training plan combination allows for the logical and convenient development of a training plan based on a skills profile for an individual. The results were well received by the customer (the Training and Development Manager). The company can claim back a portion of the skills levy based on the amounts of training spend and these amounts are accessible, from the Training database, at the click of a button. Although the results presented in table 5 may be used for quantitative assessment, for the purposes of this research project, a higher level of interaction with the subject matter was required. This can be summarised by an attempt to establish whether I was doing the right thing, rather than doing things right. The research project began with a preliminary objective of implementing Skills Development but after the first cycle of the project it became evident that there were broader issues at the heart of this subject i.e. competence, and that research should rather be directed towards the foundations of skills development and hence establishing the tenets of those foundations.

The results of the second cycle were primarily the synthesis of the requirements Skills Development Act with those of other initiatives at the company, namely Employment Equity and Activity Based costing. The second cycle began with the formation of a Skills Consultative forum. This forum was formed specifically to address the equity concerns regarding Training and Skills Development. The forum provided the ideal setting within which to draw in multiple perspectives on the problem (Skills Development) and this is reflected on the shared Mission and Vision that was developed by the members of the forum (sec. 3.8). Although one could argue that the mission and vision

	TIME	CYCLE 1	CYCLE 2	CYCLE 3
REFLECT 		On various OMDP modules.	Lack of interest from managers in distributed database and Skills development in general.	Reflect on figure 31. Performance measure, strategy, commitment etc as drivers. Export centre and AB costing initiatives introduced.
QUESTION 		Where will the most benefit be derived for: <ul style="list-style-type: none"> <li>• My own learning</li> <li>• The Company and Colleagues</li> </ul> What project can be most easily integrated with Plascon work to maximise benefit and minimise work? w.r.t. Skills Development	What is the relationship between skills and competence? What would be the most effective way to generate buy-in for competency development? What are the drivers for competence (and the development thereof)?	How do you measure and build moral? Does commitment drive strategy? How to sell Skills Consultative Forum work?
THEORY 		Chapter 1: Problem solving Qualitative Research etc. Do the right thing rather than doing things right.	Competence and change management theory as presented in chapters 2 and 3. Develop multiple perspectives on the problem will generate buy-in more effectively.	Linking Training database, Export Web Site and AB Costing results and making this info. Easily accessible (web enabled) with feedback ability will allow for measurement. Conduct further research (by interviews and polls) into the extent that the organisation is a learning organisation.
ACTION		Develop Training Database as described in section 3.5 and distribution plan figure 25. Join Skills Consultative forum	Facilitate Management session for development of competence model (figure 31). VSM Analysis, Investigate procedures	Make the SCF work easily accessible and allow easy access to the training database
<b>Table 11: Learning Cycles</b>				 <b>Evaluation: This Chapter</b>

statements are the wrong way around, or are not passionate enough etc, it is important that this task was undertaken by the SCF as a team effort. Multiple perspectives were gathered on the various perspectives of Skills Development including the management of the change that the new legislation would bring about. Employment Equity (EE) concerns on Skills Development were addressed by the inclusion of EE parameters in the Training Database (see also Appendix D). The results are discussed in the previous section and this output of the program enables one to view the training trends with regard to previously disadvantaged groups within the organisation and to tailor the plans accordingly. This is in line with the strategic objectives of the organisation.

One of the primary outcomes of the second phase was the development of an overall skills profile and training plan for the company. This was the first move from skills development towards competence and the results are shown in tables 6 and 7. Table 6 shows the critical mass of skills available at the company (for those who had been assessed at that stage) and is the one of the main advantages of the database. Hamel and Prahalad [27] argue that a key challenge in competing for the future is to pre-emptively build the competencies that provide gateways to tomorrow's opportunities, as well as to find novel applications of current core competencies. They view competencies as packets of skills. The database enables the organisation to obtain a scientific view of these packets of skills, once skills assessments have been done. The thrust of training at the organisation is also shown in table 7. The relationship between the overall skills profile and training plan for the organisation has been discussed in the previous section and can be summarised as an overview of what skill combinations exist (table 6) and the future course of skills development at the organisation (table 7).

The Model for problem solving (figure 2) is discussed below in terms of the intervention cycles with a view to evaluating the effectiveness of the model.

## **5.2 Problem Formulation**

The initial phase of the project was essentially technical problem solving. I was presented with a request to build a database and the technicalities around this issue were the main challenge that was presented. The Political, social or other aspects of the problem (as recommended in figure 3) were not considered at this stage. This is in line with my initial objective of building my own computer skills. Stakeholders were not considered as the customer was viewed as the only stakeholder. This may seem narrow considering the recommended path for problem formulation as expressed in table 1 but the approach did not impact measurably on the results of the first cycle of the project. Indeed, it accurate to say that at this stage of the project, I had a number of alternative issues that I was considering as the research topic of this project and Skills development was the one that I selected based on the interest that it sparked within me. The impact my narrow focus at the preliminary stage of the project did become evident by the start of the second phase and I was forced to reconsider certain assumptions that I held as well as my own approach to managerial problem solving.

The second phase began with a plan (my plan not the training managers') for distributing the database to the various line managers. The distributed database would essentially allow the Line Managers to develop their own skills profiles and training plans. Certain assumptions lay behind this strategy of mine and in hindsight these assumptions were not effective. The main assumption was that other managers would be as enthusiastic about the Training database as the Training manager and myself were. I did not consult the Training Manager about this initially and this lead to the development of a networked Training database which was not required (at that stage of the project). A distributed system would also violate certain cybernetic laws (Requisite Variety), as discussed in Chapter 3 (sec. 3.9). The networked

database may still have an important roll to play in the process of the Skills Development Intervention but networked functionality was premature at that stage. Later interviews revealed that greater commitment by the Line Managers to training and skills development would be required before a networked database could find full application. Thus the database presently remains at the fingertips of the myself and Training Manager. The main impact of the incorrect diagnosis (or over enthusiasm for database programming on my part) was that the time spent (about two weeks) on networking the Training database could have been used more constructively in the early stages of the project.

The above paradigm shift came about as a direct consequence of the QR interview techniques combined with a reflection using the SMP model (figure 10) in order to rephrase the problem statement, which is discussed below.

The scope of the project changed with the formation of the Skills Consultative forum (start of the second learning cycle as shown in table 11). This forum was formed specifically to implement Skills Development and I was invited to join the forum. From the Qualitative research (QR) point of view, this meant that I was coming much closer to the problem and the perspective of the problem was changing for me. Both Cybernetics and QR require one to be aware that it is not possible for a researcher to be independent of the problem. Indeed, by becoming involved in the Skills Forum I was drawing nearer to the problem and needed to be aware of the effect that this would have on my perspective of Skills Development. The net effect was a widening of the perspective and what is referred to in Table 1 as an expansion of the problem boundaries. Stakeholders and role players were identified as shown in Table 8 and this proved to be an essential part of the research process in terms of rephrasing of the problem definition. The forum was the ideal opportunity to elicit stakeholder perspectives on Skills Development and also the Management commitment to this process. Work on the forum revealed that there were greater priorities, as far as skills development was concerned, than developing a networked Training Database. Reflection at this point of the learning cycle also revealed that a more integrated approach to Skills Development was required. The work completed up to this point revealed that I had a rather mechanistic approach to skills development. Further research into the topic revealed that Competencies are an underlying basis for Skills Development (a foundation upon which Skills Development rests) and that any intervention would need to be aimed in the area of competence. In terms of Table 1, the problem was rephrased from how could we speed up the development of training plans? To.... What drives Skills Development? The answer to the former was to develop a networked Training database and, as discussed above, it became apparent that this was an inappropriate course of action once the stakeholder perspectives had been properly explored. The answer to the latter question was to explore competence in greater depth and this was the subject of the second learning cycle of the research project.

### **5.3 Qualitative Research.**

Qualitative research, as described in the introduction was not used (consciously) in the first cycle of the project. It only came into play in the second learning cycle when it became evident that the planned intervention was not proceeding as expected. The first cycle had produced a successful database for the customer but the level of interest in Skills Development and the Training database by other managers was very low. This would have serious repercussions on the implementation of any skills development interventions and hence it became important to explore this issue in greater depth. QR proved to be an invaluable technique in this respect. The emergent design feature of QR meant that the initial topic of research i.e. Skills Development, evolved into the final topic i.e. nurturing of Competencies.

The interviewing process required by QR also exposed paradox as being inherent in the training and development system. The interviews revealed that managers did not agree that training should be the first to be cut when budgetary pressure is exerted and yet this is what actually happened towards the latter part of the research project, with the proposed export centre. It is important to recognise the paradox and manage within it rather than to attempt to resolve it. QR also revealed the difference in tacit and explicit knowledge held by some of the primary stakeholders in the Skills development intervention. The patriarchal nature of the organisation, as revealed by QR, has a definite bearing on the level of commitment to skills development as evidenced by management.

The model for problem solving presented in figure 9 defines the relationship between QR and Problem formulation as consisting primarily of the QR technique of indwelling. Indwelling was not used in the first cycle of the project due to the narrow focus at that point of the project i.e. the focus was on producing a database as specified by the (internal) customer – the Training Manager. Indwelling occurred naturally due because I was part of the same organisation as this customer. The second cycle started with the formation of a Skills Consultative forum and was the ideal setting to enhance indwelling. This meant that I was able to examine my own as well as others' assumptions about skills development more closely. Interview techniques and group sessions on skills and, eventually competence were held in order to generate data. The political and psychological perspectives were examined more closely and the result was a rephrasing of the problem and the generation of a leverage point for further intervention. ***This leverage point is shown in figure 31 as mentorship/Learnership.***

The epistemological assumptions of QR meant that I could not be separated from the research topic. This meant examining my own assumptions in the process and also recognition that as I became more involved in the Skills Development process, I was affecting it and it was affecting me. The model for problem solving has as its third and final node, systems thinking and the aforementioned assumption also plays crucial role in this aspect of the model.

#### **5.4 Systems Thinking.**

One of the primary objectives of systems thinking is to uncover leverage points for effective action. Instead of developing laundry lists type solutions to problems, the objective is to uncover the leverage points where the greatest effect can be gained from the least effort. During the first cycle of the research project, I developed solution, as requested by the customer, but then proceeded along a tangent without examining whether this was an effective leverage point. Qualitative research techniques were then used to uncover the leverage points. Various systems thinking tools (such as modelling, feedback, cybernetic laws) were also employed with a view to reaching an improved understanding and correctly defining the problem, before proceeding. One of the dangers of proceeding with an incorrect “solution” is that it often tends to alienate those who are affected by the problem. This was in the process of occurring during the first phase of the project but was averted by the use of systems thinking combined with QR techniques. This is shown in figure 9 as the cross hairs on the right of the diagram. The crosshairs require that all aspects of the problem be taken into consideration (technical, psychological, political, and cybernetic) in attempting to uncover an effective leverage point that will be acceptable to all stakeholders. The two primary systems thinking principles i.e. holism and causality were used to uncover a leverage point and this is shown in figure 31-Mentorship. I facilitated management sessions in which the model for competence development as shown in figure 31 was “uncovered”. The techniques used to develop the model are described in section. 3.9 and Appendix I. This model shows the causal nature of factors affecting competence development and the holistic nature of the problem. Effective



skills development within this organisation can only be effective if the other factors, such as measurements and rewards are effective.

The leverage point identified during the research process is mentorship. This leverage point also relies on other factors being in place as shown in figure 31. This intervention point is psychologically acceptable to managers as they developed it in an open forum. It is appropriate to the technologies employed within the organisation (the database etc) and is also politically feasible, as uncovered by the interview process and discussions within the Skills Consultative Forum (SCF). From the cybernetic viewpoint, the leverage point of mentorship relies heavily on the feedback law. Mentorship is seen as a method of increasing this feedback loop. The law of Requisite variety would also not be in violation if managers who are capable of mentoring (as a possible career anchor) are identified beforehand and sufficient training is supplied. Discussions on mentorship in the SCF centred on integrating this with the current employee appraisal system and the proposed 360 feedback sessions. The self-organising law also requires that the patriarchal nature of the organisation is taken into account when implementing the mentorship system and also explains the lack of progress regarding skills development in the early stages of the project.

Although the mentorship leverage point was identified as a leverage point for skills development, an earlier and possibly more important leverage point was identified at the start of phase two, namely that of dialog. A dialog was started with various managers, the subject being competence. This dialog was started with a view to obtaining a deeper understanding of the attitudes and belief of the various managers to skills development. This dialog resulted in the identification of the mentorship leverage point as shown in figure 31. Hence, dialog itself is also seen as an important leverage point. This dialog has important repercussions for both strategy (which is a key to competence development as shown in figure 31) and the cybernetics within the organisation. The dialog on competence and the group sessions had the effect of increasing the feedback within the system and also had the potential to increase the requisite variety through awareness and learning, although this was not measured.

### **5.5 Change Management.**

My approach to change within the course of the research project varied according to circumstance as described in the analogy of the navigators as described at the start of section 2.3. The early phase of the project was essentially one of opportunity-based change where I designed a product and then attempted to maximise the returns from the product. The net effect of the maximisation attempt was very disappointing and forced a review of the intervention as I had initially intended (networked database). Greater benefit for all stakeholders came during the second phase of the project or the dialog phase. This phase was characterised by emergent change (see fig.12) and was closely linked to the emergent design aspect of QR. As changes occurred, these were taken into account in the evolving design of the intervention point.

The greater part of the project was characterised by a low turbulence environment and as such, much progress was made, particularly in the latter phases of the project once common understanding through dialog had been achieved and the shared mental model for competence development, as shown in figure 31, had been developed by the management team. However, with the introduction of a restructuring exercise (see 3.11) the organisation went abruptly from low to high turbulence (fig 14). Although Skills development moved rapidly down the agenda as the restructuring progressed (December 2000), the competence model, as shown in figure 31 was used in the restructuring progressed (informal interview with two managers). In this way, benefit was derived from elevating the skills debate from that of skills



to that of competence **development**. The essence of this debate (by managers and at the SCF) is contained in the quotation by Manning (sec. 2.9):

*Managing the corporate conversation is the strategist's most important responsibility. Nothing else matters as much. And fundamental to that task is the use of language – of words, phrases, concepts, metaphors, emphasis. The 26 letters of the alphabet can be combined in many ways. How you use them determines how well you do in the markets place. [22].*

Or in the words of Wittgenstein:

*People don't have conversations, conversations have people.*

At the start of cycle two, dialog was attempted as a change strategy and this dialog culminated in the competence development model shown in figure 31.

One important aspect of change management was not taken fully into account during the research process. Dissatisfaction with the status quo was not created as far as skills development was concerned and even the mentorship leverage point is still considered a nice to have and not an essential part of skills development by most of the managers. Sufficient dissatisfaction was not created and this will need to be addressed as the intervention proceeds from this point.

Change and the management thereof is a crucial factor in organisational problem solving. Change is part of problem formulation, in that, as understanding evolves, the problem definition changes (for some). Change is integral to the learning loop that underpins action research (figure 9) and the cyclical SMP model discussed above (fig. 10) in that learning involves change in the perspectives of the learner, particularly when confronted with intellectual challenges such as paradigm shifts. Finally, Systems Thinking provided the most effective method for me to manage the variety, which is, in part, change management. Although I played, in the main, a facilitation role in the second cycle of the research project, the changes taking place affected me and the course that the project took. Understanding the effects of both moderate and severe change on all the stakeholders in the Skills debate (particularly the Unions) assisted in timing of the various parts of the intervention.

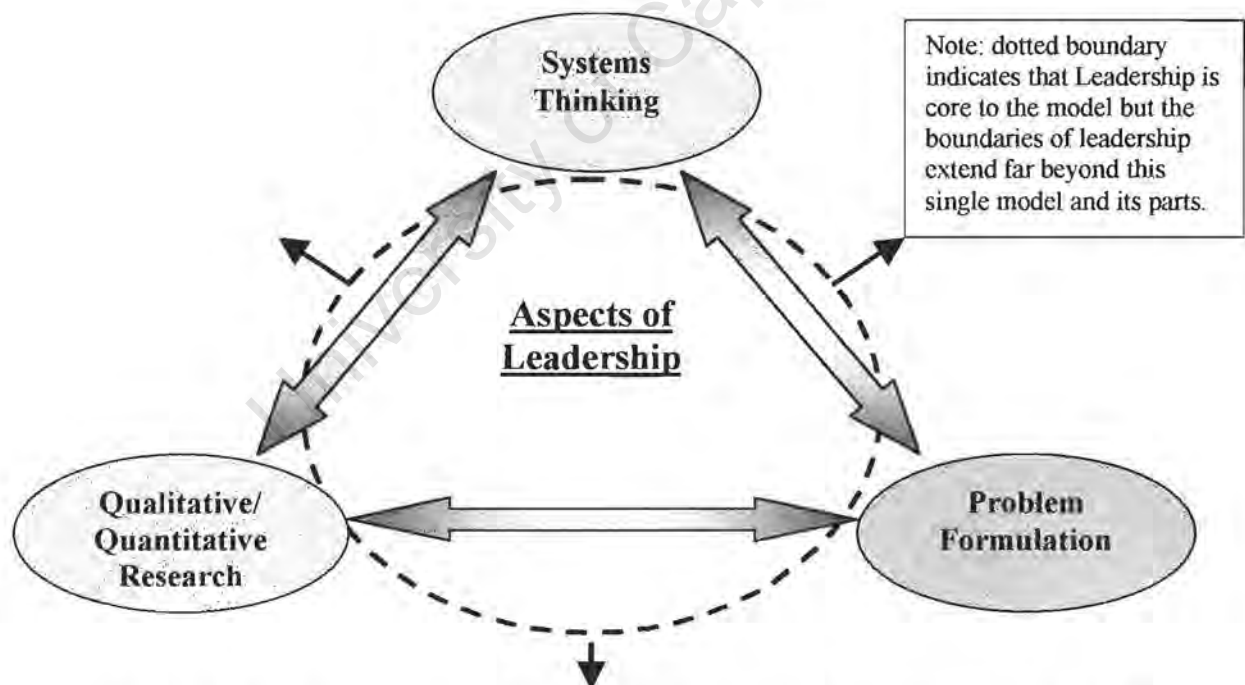
Two concerns about the model for managerial problem solving (fig. 2) have been raised in this reflection process and these concerns surround the role of strategy and leadership and where they fit in model. Concerning leadership, I would argue that change management is but one of the many facets of effective leadership, others being the creation of excellence, direction, purpose, perspective, vision, foresight etc. O'Brien [49] argues that:

*Leaders who can foresee future problems and develop communication plans will be more successful in motivating employees to **embrace the change effort**, helping them to shift their values and beliefs in order to alter their behaviours.*

This issue was alluded to in the final reflection process by the question: how do we build moral? (see cycle 3 in table 11). This question should be discussed by the management team (and other stakeholders) and is the subject for ongoing QR at the organisation. Effective leadership is a prerequisite of successful change management. This brought about a change in the model and is shown in figure 35.

Leadership, which change management is a part of, plays a central role in managerial problem solving. The model has been redrawn below to show the change. The model shows that aspects of leadership are central to the model. Thus the model forms but **one part** of leadership. The dotted boundary indicates that leadership extends far beyond this single model and its component parts. The second concern is that of strategy and its role in the model for managerial problem solving. Strategy and strategic thinking is not isolated to one particular part of the model. Parts of strategic thinking can be found in the Problem formulation node of the model e.g. when generating options and thus scenarios, and in the Systems thinking node e.g. when formulating policies and this has been discussed in various places in this report (see sec. 3.9). I view the various aspects of strategy as being part of the different parts of the model. Strategic thinking is also implicit in the core of the model i.e. Leadership.

Another weakness of the model is also its focus on QR. Although, as argued in the QR section of this report, the qualitative approach is more amenable to managerial problem solving than qualitative approach, quantitative research can still yield important insights into a problem. I would prefer, when faced with future managerial problems to follow a middle path and this means using a combination of the two research approaches. Obviously, this depends on the situation and this was highlighted in this project where quantitative data was obtained (skills assessment data) but was not considered relevant because the field of focus was broadened from skills development to competence development. The skills assessment data can still yield important quantitative insight into the organisation. The revised model is draw below. The relationships remain the same as those shown in figure 11 and elaborated on in chapter 2 of this report.



**Figure 35: Revised Managerial Problem solving model showing aspects of leadership as core to the model (but not restricted to the model). These aspects include change management and strategic management.**

## 5.6 Modelling Competence

In the course of the project, the emergent design methodology of QR meant that as more knowledge on the subject was uncovered, so the direction of the project would emerge or evolve. Thus the initial research topic evolved from Skills development, to competence, to the development of competencies. The model developed by the management team (as shown in figure 31) is a generic model for competence development within this organisation. The advantage of this is that the model is highly amenable to change. Interviews conducted with various managers revealed that there was definite knowledge of core competencies within various departments but the development of these competencies was an uncertain area. (Why develop a competence that will become redundant in a year?). Hamel and Prahalad conceive of competition for the future as essentially competition for competencies and they put forward three reasons (3.6 & fig 27): transcendence, growth and risks. In the light of this, the model for competence is about the development of competence and is not specific to a particular business unit within the organisation. The model is more generic in that competencies become redundant but a solid approach to competence development can easily outlive the competencies it is used to build. Hamel and Prahalad refer to this as the *transcendent* facet of competence.

From the point of view of the risks in competence development, Hamel points out that interventions involving the nurturing of competence often last years and hence need to be more carefully considered from the point of view of risk. An integrated and holistic approach to the Model for Competence Development (fig. 31) is supported by the fact that a management team developed the model in group sessions and a such is a shared mental model (see section 2.4). The fact that the model was developed in an open forum by the team provides a foundation for the sharing of mental models and this was evident in the sessions that were used to build the model. A forum in which assumptions can be questioned is integral to the development of a learning organisation and thus contributes to this objective (as set out by the Ops. Director).

The third aspect of competence that needs to be considered when accessing the Model (fig 31) is growth. Hamel argues that a good product is built on effective competencies and nurturing these competencies will ensure competitiveness. The essence of the model for competence is development and the various factors that need to be in place for competency development to be effective. Competencies need to be uncovered, and the job profiling process (skills plans), as embarked upon by the Skills Consultative Forum (SCF), needs to be supported at all levels in the organisation. The SCF develops the profiles and these are then aligned to the strategic objectives of the broader system (i.e. the Group). This process is typical of a competence determination process [42,43,44] and must be continued and the renewed commitment of the management team to the SCF and competence nurturing and acquisition should be sought.

## **5.7 Conclusions**

1). The Training and Development Database assisted in the implementation of the Skills Development Act. The short-term objective of claiming the Skills levy for the organisation was achieved as well as the longer-term objective of providing a more robust foundation for Skills development, as mentioned in pt. 2 below.

2). The model for competence development (fig. 31) that was developed by the management team will further assist in the implementation of the Skills Development Act from the point of view that management has "bought into" the concept mentorship and Learnership. This is a step towards both compliance with current legislation and towards competency profiling and building a learning organisation. The modelling process also surfaced many important questions and the current problem statement "how do we build moral?" needs ongoing stakeholder (management and others) debate. A change management policy is required at the company.

3). The model for problem solving (Fig. 35 - see also fig 11 for relationships) that evolved as part of the emergent design methodology of QR, has provided a platform for organisational problem solving but requires that all aspects of the model are used i.e. neglecting one part of the model when faced with a problem will result in a markedly reduced problem definition and hence intervention. The model for problem solving thus requires a holistic approach and is seen as part of a larger picture, that of leadership.

4). Previous management models that have been developed by the author and others, as part of the OMDP course, together with the Systems techniques taught in the OMDP course have proved to be invaluable building blocks in this research project, particularly in the building of the models for Problem Solving (fig. 35) and Competence Development (fig. 31)— the primary outcomes of this research project.

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## Glossaries

### Glossary A : Skills Development and Competence Terms

### Glossary B: Systems Thinking and Cybernetics Terms

#### GLOSSARY A – Skills Development and Competence Terms

**Skill:** A skill is *practiced ability*. It will be used when referring to the ability of an individual to perform a task or set of tasks.

**Competence:** A competence is a bundle of skills. The word competence will be used when referring to both individuals and to the company. The definition provided in the Skills Development Bill provides for this latitude. Competence of an individual in a skill depends on the three factors described in the definition of “competence of skill” in the previous section. In the area of functional ability, competence will be used to refer to an individual’s skill within the context of the company. Hence the relationship of that skill to broader company goals is taken into account. Core competence has three defining characteristics described above and will be used when referring to the company competencies.

**Cybernetics.** The science of effective organisation.

**Qualitative Research.** Qualitative research examines people's words and actions in narrative or descriptive ways more closely representing the situation as experienced by the participants.

**Quantitative Research.** Quantitative research is based on observations that are converted into discreet units that can be compared with other units by using mathematical methods. The focus of this approach to research is primarily concerned with the explanation and prediction of observable events.

**Skill:** A skill is practiced ability.

A **learning organisation** is an organisation skilled at creating, acquiring and transferring knowledge and at modifying its behaviour to reflect the new knowledge.

The following entities can be defined:

·**Professional knowledge.** This means the level of technical/professional expertise in a specific business function relating to customer issues, day-to-day operational tasks, projects, and development of new products/services and business opportunities. This competency covers building, maintaining and developing technical expertise.



*Orientation.* This means the ability to create professional internal and external customer relationships adding surplus value to the customer and leading to long-term, profitable relationships and expansion of business. This competency covers understanding customer needs, delivering service to meet or exceed expectations and quality standards and building solid mutually respectful business partnerships. The term “customer” is used to include end-user customers, suppliers and partners.

*Relationships.* This means establishing effective interpersonal relationships between individuals and across cultures. This competency covers understanding of diversity, sensitivity to others and networking.

*Coaching.* This means the ability to develop the skills, knowledge and performance of others in order to build the organization’s capability. This competency covers providing coaching/guidance, giving feedback to build understanding and sharing information/knowledge with others.

*Leadership.* This means the ability to focus on the achievement of goals and to monitor to ensure results are achieved. This competency covers goal setting, monitoring and measuring.

*Communication.* This means creating common understanding and conveying information accurately, both verbally and in writing. This competency covers speaking and writing effectively, active listening and, involving and influencing others in a global business context.

*Business awareness.* This means understanding the business economics, customer markets and the organization and operating environment to ensure the organization’s financial success. This competency covers understanding the market and customers, knowing the business and understanding the impact on costs and profitability.

*Adapting to and management of change.* This means the ability to adapt to changes in strategies and the organizational environment. This competency covers flexibility, the ability to identify the need for and assess the benefits of change and the management of change.

*Analysis and decision-making.* This means collating information, identifying issues and critical relationships, weighing the evidence, assessing options for resolving problem situations and making judgement on optimum course of action. This competency covers diagnosis, investigation, analysis, and the ability to devise creative practical solutions and decision-making.

*Planning and organizing.* This means devising plans to achieve desired results with the most effective and efficient use of time and resources, organizing activities according to priorities and the need for co-ordination and co-operation with others. This competency covers planning and prioritising, attending to quality issues and monitoring progress.

### Accreditation

The periodical certification, of a person, a body or an institution as having the capacity to fulfil a particular function in the quality assurance system set up by the South African Qualifications Authority (SAQA), Act No. 58 of 1995 and in terms of the Education and Training Quality Assurance body (ETQA) Regulations, No. R.1127 of 1998.

### Assessment

The process of measuring the achievement of the learner against specified National Qualification Framework (NQF) standards or qualifications.

### Designated Groups

Black people, women, and people with disabilities as defined by the Employment Equity Act, No. 55 of 1998.

### Employer

Any person who pays or is liable to pay a person an amount by way of remuneration and a person responsible for paying an amount by way of remuneration to a person under the provision of a law or out of public funds or out of funds voted by Parliament or a Provincial Council, in exchange for work done.

### Employment context

The nature of the working environment within which the structured workplace learning will occur, e.g. Formal or small business environment.

### Employment contract

The contract between the employer and the employee, which describes the employment conditions and rate of remuneration.

### ETQA

A body accredited in terms of sections 5 (1) (a) (ii) of the SAQA Act (No 58 of 1995) responsible for monitoring and auditing achievements in terms of national standards or qualifications and to which specific functions relating to the registration of national standards or qualifications have been assigned in terms of section 5(1) (b) (i) of the Act.

### Learner

The person who is party to a Learnership Agreement with an employer or group of employers, and a training provider or a group of training providers.

### Learnership

Consists of a structured learning component and practical work experience of a specified nature and duration, and culminates in a qualification registered with SAQA.

#### Learnership Agreement

An agreement entered into for a specified period between a learner an employer or group of employers, and a training provider or a group of training providers.

#### Mentor

Someone who provides guidance and/or counselling to learners.

#### NQF

A National Qualifications Framework to provide for the registration of unit standards or qualifications.

#### Quality assurance

The process of ensuring that the required degree of excellence is achieved.

#### Outcome

Contextually demonstrated end products of the learning process.

#### Registered Training Provider (RTP)

Training providers registered with the Department of Education and/or accredited by ETQAs and SAQA. "Training Provider" shall also mean registered training provider in each case.

#### SAQA

The South African Qualifications Authority established by section 3 of the SAQA Act.

#### SETA

A Sector Education and Training Authority established in terms of section (a)(i) of the Skills Development Act.

#### Skills Programme

A skills programme that is occupationally based; that utilises training providers and when completed, will constitute a credit towards a qualification registered in terms of the NQF.

#### Training Programme

A programme, which is followed in the course of training a learner.

#### Unit Standard

Registered statements of desired education and training outcomes and their associated assessment criteria together with administrative and other information.

### Workplace

The place where a learner will receive structured working experience

Most of these glossary terms have been adapted from a list compiled by Dr. Karin Lundgren-Cayrol

## **Glossary B: Systems Thinking and Cybernetics Terms**

### Adaptation

Adaptation refers to evolutionary type of changes (usually involves a progressive modification of some structure or structures) which a system makes in order to cope with the changes in the environment, while still keeping the essential attributes of the systemic structure and processes constant.

E.g. : responding to increased enrolment by hiring more teachers; adjusting the clothing to suit the weather.

### Autonomy

Autonomy refers to a system that is able to act with a great deal of independence, with minimal constraint from other systems. It also implies systems with good regulators, and requisite control variety.

### Business Activity

Business activity in this context means a business task, act, process - or a collection of these - which constitutes the common 'busy-ness' of business.

### Model

An homomorphic model is a representation of a simplified chunk of "reality", reduced in complexity but including essential information to understand that "Reality". It is a simplified representation of something already existing based on some theory and using some standard formalisms.

Models may be physical, schematic or mathematical. A cyber systemic model represents and probabilistically predicts the interesting behaviours over time of whatever system it represents.

### Regulation

Regulation occurs when a system operates so as to remain in a desired range of states and/or produce desired outputs.

### Stability

When critical variables are held invariant or remain within specified limits, stability is obtained.

### System in Steady State

A system that is in a steady state is in dynamic equilibrium. The structure is maintained despite the fluctuation in input (Cf. homeostasis). The better the regulator, the better the control, the more chance to keep the components in equilibrium, and the system in a steady state. The drawback is that it does not allow for change. The question is how to determine the balance.

### Variety

Variety refers to the number of possible states a signal or system can take. It is a measure of a system complexity.

### Viability Principle (Beer, Stafford)

Viability is the function of the balance maintained along two dimensions:

- autonomy of subsystems versus integration;
- stability versus adaptation .

Implication: For a system to be viable it needs to adapt on a short term basis, but keep integrity (ethical) in the long term.

Example: One needs to adopt a certain role for a certain job, but not loose one's identity; (cf. schizophrenia is a sickness, where the system is not able to adapt, therefore not viable).

### System Holism Principle

A system as a whole works differently than the parts of the system. The parts alone cannot do what the system can.

Example: a motor without a car; a film with no story; a body without a heart;

individual alone versus the same individual in mass (forum incident); individual in a collaborative versus individual in competitive environment.

Therefore, it is necessary for a system to have functional parts that communicate efficiently.

### Synergy

The sum of the parts are greater than the parts added together. ( $2+2=5$ )

This is because 'productivity', or effectiveness, is a function of the *product* of the interaction of the parts, and not the *sum* of those interactions.

### Darkness Principle

Even though a system is never completely known, it can be managed effectively (black box theory).

Example: even though you do not know every student completely, knowing certain characteristics such as learning style, age and prior knowledge, can help you help the student learn.

### 80/20 Principle

In large, open and complex systems, 80% of the work (output) is produced by only 20% of the system.

### Complementarity Law

Differing perspectives on the same system are neither 100% independent nor 100% compatible; yet together they reveal more truths about the system than either could alone.

Example: Three blind men and the elephant: the first felt the trunk, the second felt the legs, and the third felt the ears, building three different tales, together a better picture.

### Hierarchy Principle (Recursion)

A system is always contained in another system. Thus each system has sub-systems as well as suprasystems. (Nestedness.)

Implication: Realizing the nestedness helps in dealing with complexity thus reducing uncertainty, and increasing in information about a system. Example: Advance organizers, increase the information about a system (complex contents), reduces the uncertainty, and therefore leads to better understanding.

### Godel's Incompleteness Theorem



No complete truth exists. Paradoxes can always be found. Even accepted theories contain unreliable propositions.

Implications: At any hierarchical level, the communication between systems is bound to be incomplete. (See topic 'Hierarchical & Heterarchical Systems')

#### Redundancy of Information Theorem

It refers to the necessity of giving the same information in many different ways, to increase the possibility of correct transmission, even though increase in channel capacity is necessary and more costly.

Implication: In the long run, it is more efficient to repeat instructions, although the initial cost in time and money might seem high.

Example: To get students to learn a concept, use both graphical and textual explanations in many different ways. Effective speech, tell what you are going to say, say it, and finish by resuming what you have said. (Research report; lit. review; method section; conclusion).

#### Redundancy of Resources Principle

To minimize the effect of disturbances or noise the system requires backup systems of critical resources (human and machine) in order to maintain stability. Implications: Plan actions before disturbance or noise happen, because they will.

Example: If the teacher gets sick, a substituting teacher exists, materials are available, etc.

#### Redundancy of Potential Command Principle

Because information or knowledge = power, a system needs to ensure that enough people have this knowledge and can take over if the need arises.

Implication: "2 heads are better than 1"; Duplication of information is necessary.

Example: Submitting a book/article to a publisher usually requires several copies, and keeping one for self.

#### Relaxation Time Principle

A system can only be stable, if it is allowed enough time between disturbances to recover and go back to "normal" steady state. #Disturbance /Time determines whether the system can possibly maintain internal stability.



Implication: To maintain smooth functioning of a system, it has to foresee disturbances, shocks to the system.

Example: In HIV positive people, the body does not have enough time to recover. Burnout is caused by people working and worrying too much. Cutbacks and inflation in a factory lead to unemployment.

#### Circular Causality Principle I (Positive Feedback)

In the presence of positive feedback, it is possible to achieve an end state that is radically different from the initial one.

Example: Glorious advertisement to sell cigarettes, without prompting the possibility of getting lung cancer. To provide a discovery-learning lab in chemistry, without providing safety rules.

#### Circular Causality Principle II (Negative Feedback)

A negative feedback helps the system to maintain equilibrium and stability.

Implication: Guiding and managing is necessary to obtain a goal without the system "blowing up". The principle prompts corrective prevention or planning techniques.

Example: Prevention techniques (foreseeing change). Tell the teenager that life is longer than tomorrow, and it is not necessary to stay out until 2 am., thus curfew at 11:30. If student too talkative tell to talk less, if too shy prompt to speak up.

#### Feedback Dominance Theorem

It is possible for feedback to dominate or take precedence over all other types of inputs.

Implication: The principle prompts one to seek other causes (i.e., positive or negative loops) for failure of a system than obvious.

#### Homeostasis Principle

For a system to function properly and survive, all the essential variables must be present and maintained within their ranges of variation.

Example: Hypothermia. Certain deviations are okay, but others are not. Body temperature should range between 36°C to 37.5°C.

If failing at everything, the teacher or student will be nonviable.

#### Steady State Principle

For a system to be in equilibrium, all its parts (subsystems) must be in equilibrium. If a system is in equilibrium, then its parts are in equilibrium. (Not necessarily a positive state/equilibrium, cf. totalitarian states; religious sects allowing child abuse).

Implication: Surveillance systems and control systems are necessary to maintain a system in equilibrium. The principle prompts one to ask questions about reversible loops causing the system to stand still, not change, and not grow.

Example: Battered women/child syndrome. The woman is too scared to tell, so the husband can keep on beating; The man can beat because the woman is too scared to tell.

The Learning Robot memorizes content to pass a test, and then forget; Pass a test because memorized content but then forgets. (See topic 'Feedback Loops')

### The Law of Requisite Variety

The regulator must have as much or more variety, than the system it regulates. Control of a system depends on the variety of the regulator and the capacity of the channel between the regulator and the system. It is costly both in time and resources to obey this law.

Implication: It is important to plan for many states=situations and many misunderstandings.

Example: When kids are new-born, regulation is easy. They grow and you have to choose what are the most essential (cf. homeostasis). One-to-one tutoring is costly but effective, since easier to plan. Mass media is cheap but ineffective. Where is the balance? The notion of degree of control, the teacher can answer 80% of the questions, he/she has 80% control of the class. Channel capacity, teacher being able to provide for different leaning styles, new vocabulary, fatigue etc.

### Conant-Ashby Theorem

Every good regulator of a system must have a model of that system.

Implication: The principle prompts one to think through and create a model of what you are teaching /managing /guiding.

Example: Assuming knowledge/information when there is none. Instructional designer creates a model of the content, the learner and the teacher; the more precise the more control. The computer scientist creates a model of the user. Poor model leads to chaos.

### Self-Organizing Principle (Autopoiesis)

A tendency have been found that the systems feeling "near death"/chaos/conflict/"on the edge" will start to reorganize in order to survive and grow.

Implication: A bit of chaos/conflict is good to promote growth and learning. What do systems do to survive?

### Basins of Stability

Complex systems have local areas of stability and instability. (A marble on top of a ridge will eventually fall. )

Implications: If the organization is too stable it cannot grow, and it is essential to grow for survival. It is closely related to entropy, Autopoiesis, and chaos theory.

### Recursive System Principle

A viable system always contains and is contained by another viable system or many (cf. nestedness)

Implication: The deep structure has to permeate the whole system and in its parts. The system must strike a proper balance between stability (i.e. homeostasis; negative feedback, autopoiesis, equifinality) and change (i.e., positive feedback).

Example: If you are not both mentally and physically healthy you cannot be efficient. If one cannot both memorize and question content, one cannot learn.

### Entropy (2nd Law of Thermodynamics)

Definition: Entropy is the ratio of available energy over total amount of energy in any closed system over time and any open system is closed at some level in the hierarchy. The ratio always increases at a macro level. On a micro level, one can momentarily decrease the ratio.

Clarification: The total amount of energy is constant in a closed system, but the amount, which is available decreases/becomes smaller.

Implication: Therefore, to counteract the loss of available energy/mass /work (also called, exergy, essergy, hekergergy) a system needs to be open to the environment to promote survival, growth, learning, etc. However, it still, over time, tends towards chaos, that is loss of available energy.

Examples: A life span, tremendous growth as a baby continuously slowing down. Earth's evolution; explosion, creation of life, man and machine and then?

By teaching a student a learning strategy ("guidance") you increase order, and the student can survive better in the school, that is his/her capacity increase. A car or your body; although you keep up with taking care of it, in the end it is finished, although it is still there, but useless. But the "maintenance" (increased order) keeps it "alive" longer.

### Ubiquity and Unification Principle

Certain mechanisms and laws hold for many different kinds of systems studied in biology, psychology, or engineering.

University of Cape Town

## Appendices

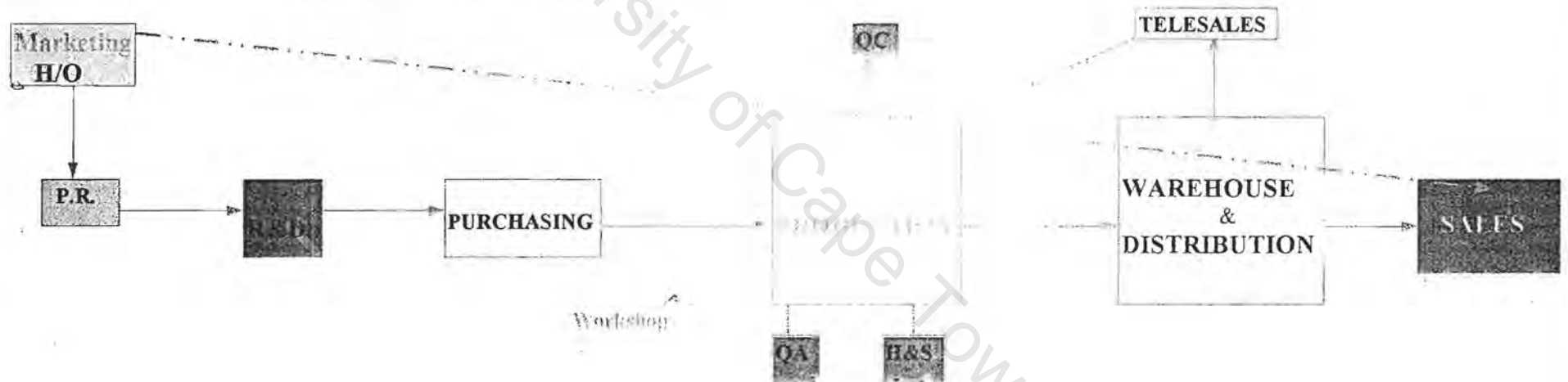
Appendices	Description	PAGE
A	The Skills Intervention	
B	Training and Development Observations	
C	Strategic Observations	
D	Interviews	
E	Training Pathways	
F	Competence	
G	Job Profiles	
H	Legislation – Skills Development Act etc	
I	Competence Causal Loop diagram Generation (CLD's)	
J	Viable Systems Models (VSM) and Cybernetic Laws	
K	VSM's for the Project	
L	Proposed Learning Organisation Survey	
M	CLD – Continuous Improvement	
N	Minutes of Meetings	
O	The Training Database Help File	

## APPENDIX A: SKILLS MATRIX WORKSHEET 1.

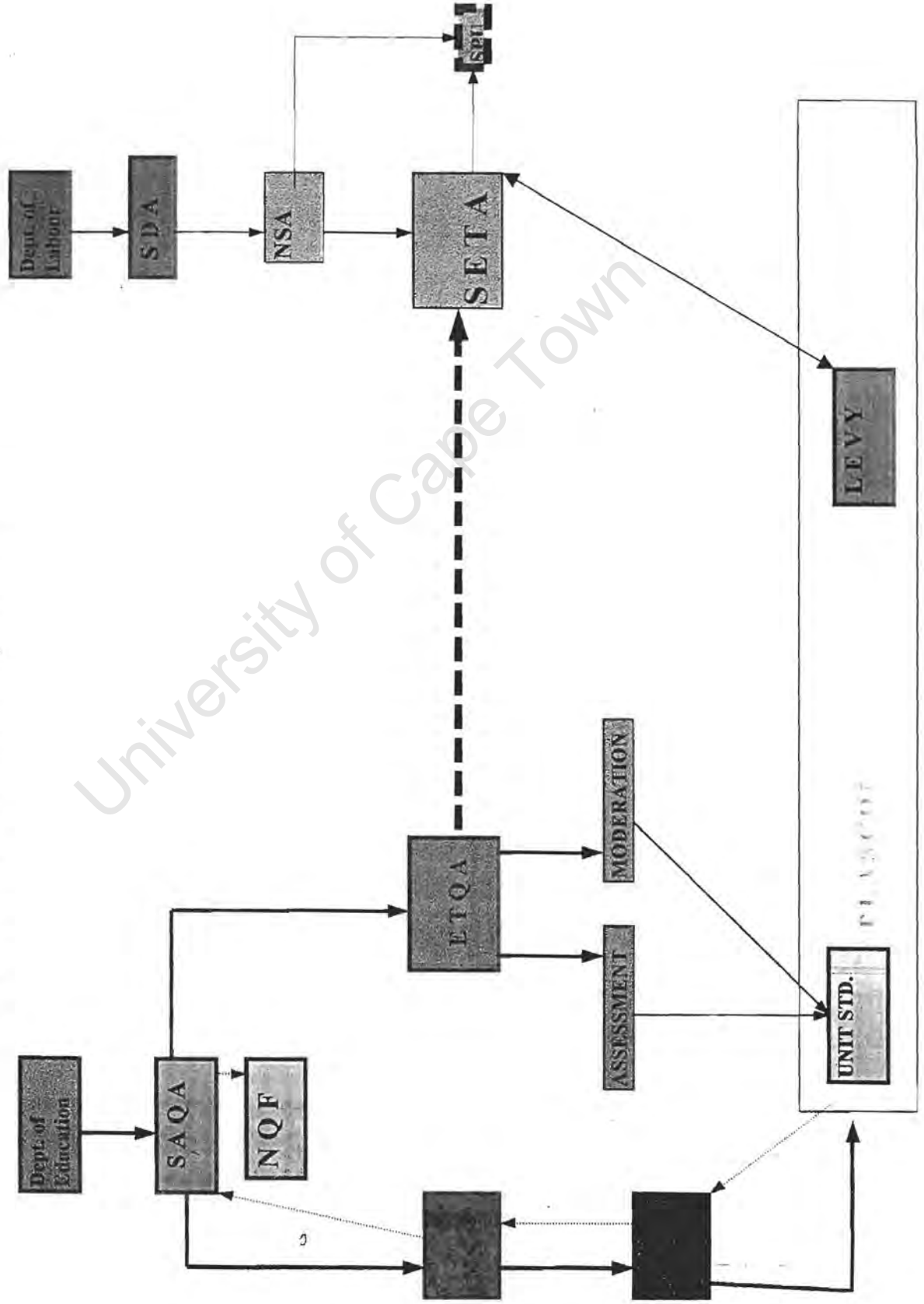
Plascon Mission Statement:

Functional areas:

### FUNCTIONAL VALUE CHAIN



# SKILLS DEVELOPMENT STRUCTURES.





Various other reports were initially available (June 2000) from the training database and these are discussed below and presented on the pages that follow. These graphics were originally requested by the customer and are presented as observations for the purposes of this research project.

### **Training Planner – Course Levels**

The Skills Development Act requires that all training be categorised into various levels. This may seem rather mundane but there are financial implications in that the Act stipulates that the company must pay skills levy (see appendix H) and that this levy can only be claimed back on training undertaken at particular levels in an organisation. This was a specific output required of the Training Database and the results are shown on the following page. The pie chart indicated what percentage of the training spend for a particular period was allocated to the various training levels, as stipulated in the Skills Development Act. The period over which the results are taken is shown at the top left of the page. The actual amounts that can be claimed back from the Skills levy are shown in more detail in another report (See Appendix A) and the pie chart is a summary of this information. The graph indicates that 4% of training spend will be on ABETS (adult Basic Education and Training) and 11% on SUPER (supervisory Training) for the selected period. These are examples of Training levels where the training spend can be claimed back from the receiver of revenue. It is envisaged that the amounts spent on other types of training, such as management training will not be reclaimable but this had not been finalised at the time of writing. The graph below the pie chart is a later addition to the functionality of the program and will be discussed at a later stage in this report (see Cycle 2)

### **Grade Training**

Employee information for all 232 staff members was imported into the database and this facilitated the extraction of other information once the process for developing the training plans had started. The amount of training spend on the various grades in the company is shown in the Graph titled Grade Training Cost Comparison. This graph summarises all the information in the database according to the employee grading system (Patterson) currently in use at the company. The user can customise the type of grading system.

### **Skills Profile**

If the rating system on the skills profile form is used, these ratings can then be compared for individuals in a department. This comparison is presented on the graph titled Skills Profile.

### **Department Training**

The final graph presented is a comparison of the training amount spent for each department in a specified period.

# Job Category Report



A training cost breakdown for the groups is shown on the next page

Training Department

## Qualitative Assessment - Training Costs From 2000 to 2001

Categoryname	Female - Coloured	Female - Indian	Female - White	Male - African	Male - Coloured	Male - Indian	Male - White	Totals
Clerks	R 41,170	R 2,200	R 12,480	R 0	R 88,646	R 2,950	R 3,020	R 150,446
Craft	R 0	R 0	R 0	R 0	R 4,500	R 0	R 0	R 4,500
Management	R 0	R 0	R 25,800	R 0	R 33,100	R 0	R 94,950	R 153,850
Operator	R 7,930	R 0	R 0	R 50,965	R 44,926	R 0	R 0	R 103,821
Sales	R 0	R 0	R 11,850	R 18,150	R 130,969	R 0	R 78,150	R 239,119
Supervisory	R 10,700	R 0	R 0	R 16,100	R 117,800	R 0	R 0	R 144,600
Technical	R 4,500	R 0	R 0	R 13,346	R 30,619	R 0	R 0	R 48,465
Totals:	R 64,300	R 2,200	R 50,110	R 98,561	R 450,560	R 2,950	R 176,120	R 844,801

TABLE 9: JOB CATEGORY REPORT - SKILLS DEVELOPMENT LINKED TO EMPLOYMENT EQUITY

Compiled by Phillip Twynam

16 December 2000

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# Training and Development Report

From 2000 to 2005

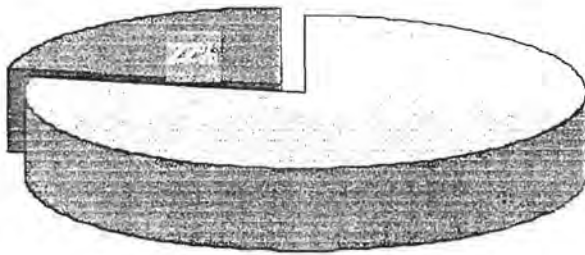
Costs are shown at current value



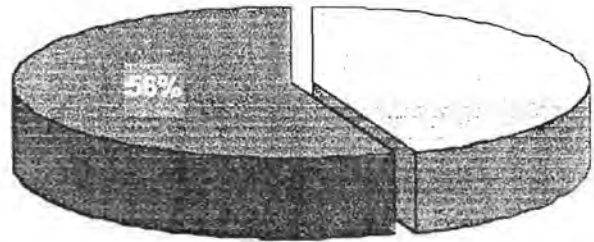
Training Department

## Designated Group Cost

Total Expenditure



Average Expenditure



Designated Group Total Training Costs

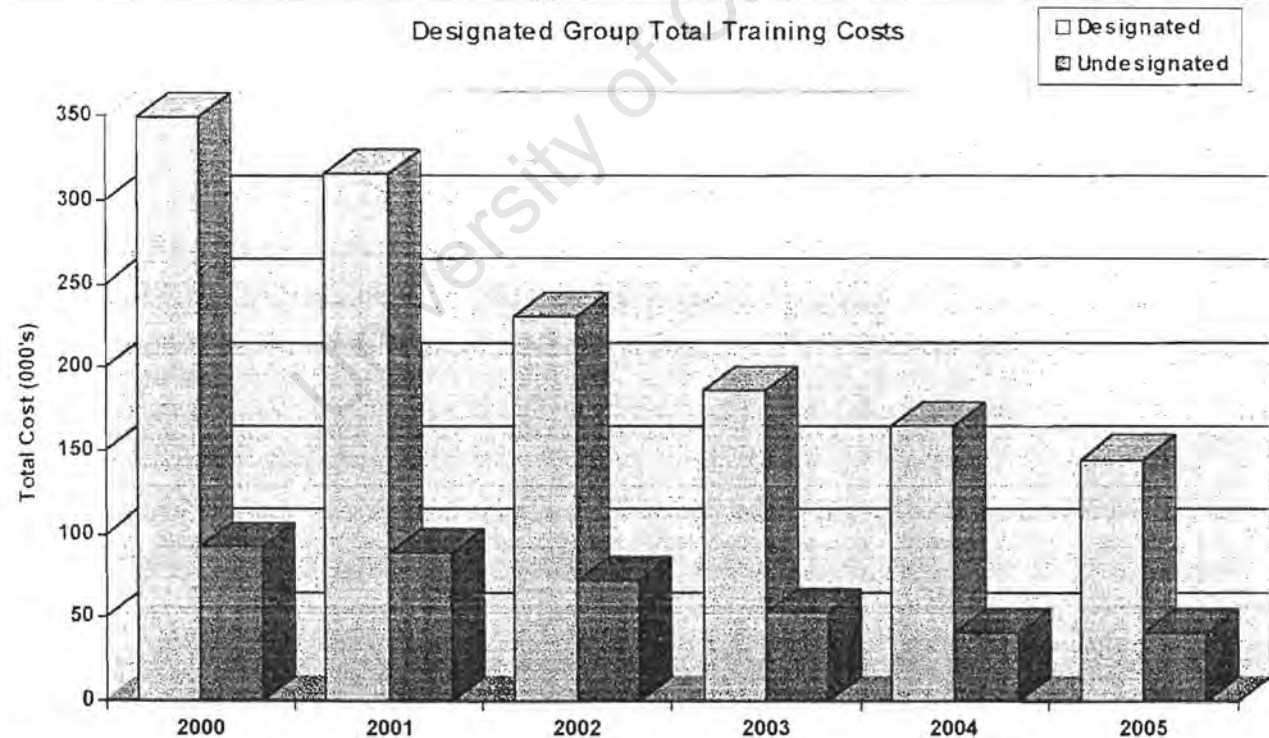


FIGURE 28: EMPLOYMENT EQUITY PROTECTION

9

# Training and Development Report

From 2000 to 2005



Costs are shown at current value

Training Department

Designated Group : Average Training Costs

□ Designated  
■ Undesignated

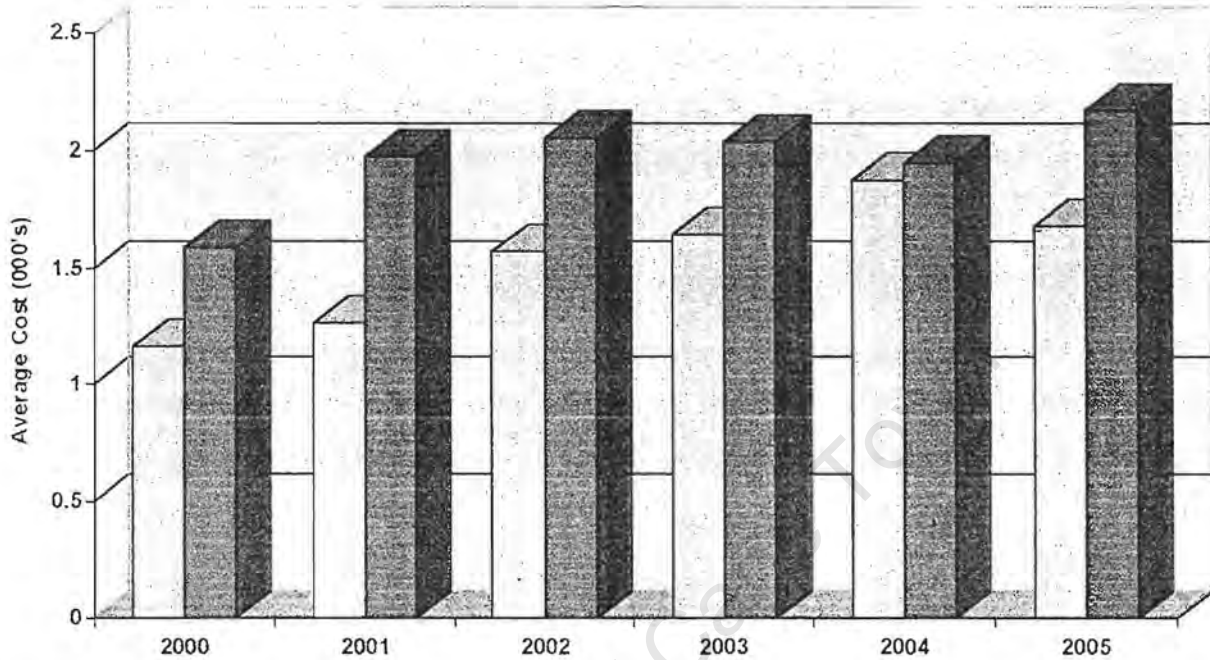


FIGURE 28 CONT.

# Training and Development Report

From 2000 to 2004

Department

132-05

QC



## Designated Group - Training Costs

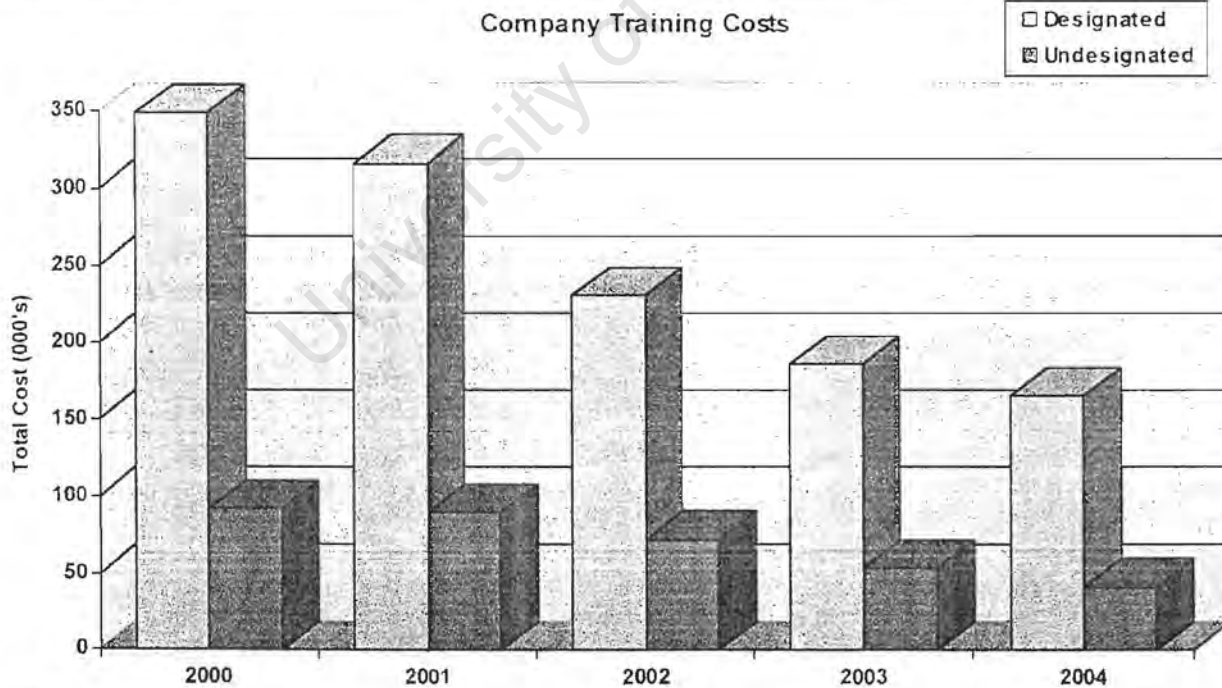
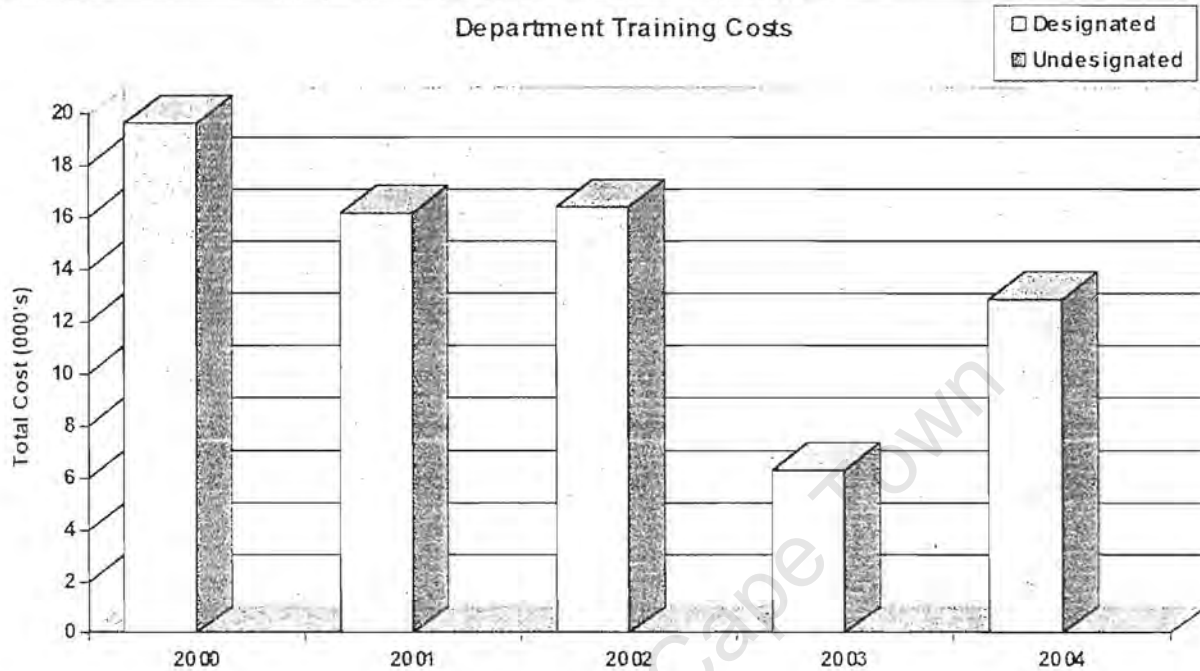


FIGURE 29: DEPARTMENT VS COMPANY EQUITY PROGRESS TREND

Compiled by Steve Osborne

16 December 2000

Costs are shown at current value

Page 1 of 1

# Training Planner - Course Levels

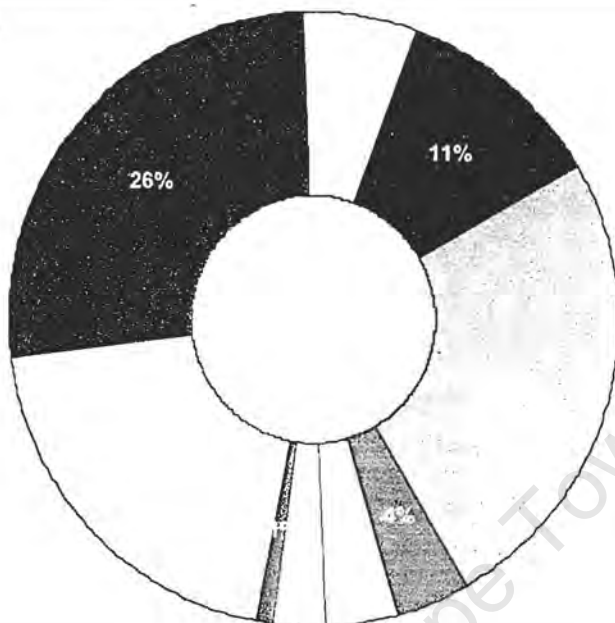
From 2000 to 2001



Training Department

## Training Level Costs

- ☐ Slice 1
- ☒ ABETS
- ☐ BOSIE
- ☐ EE
- ☒ LEGIS
- ☐ MANAG
- ☒ OPRAT
- ☐ SALES
- ☒ SUPER



## Designated Group Costs

- ☒ Designated
- ☐ Undesignated

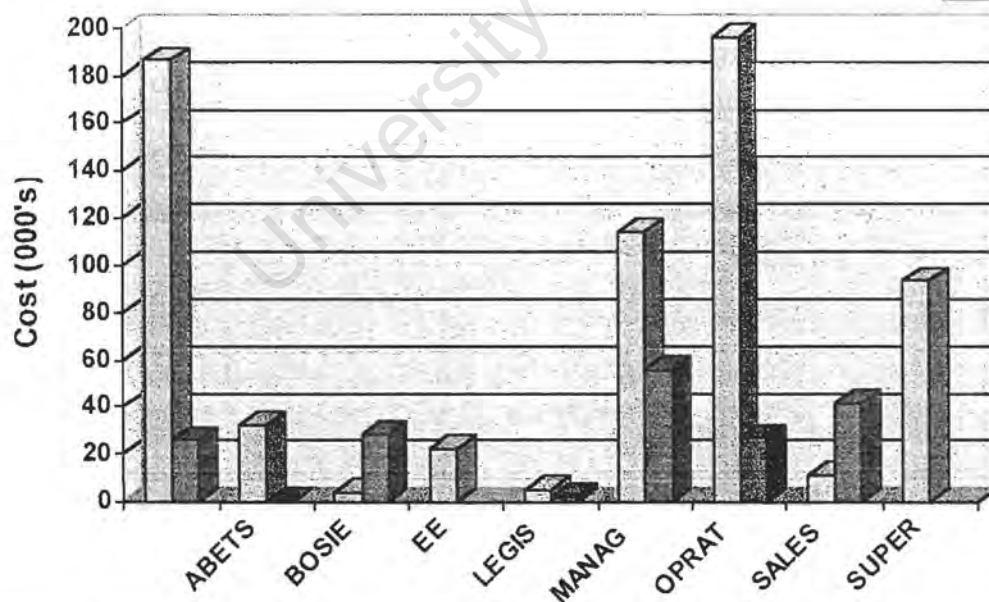


FIGURE 20: SKILLS DEVELOPMENT TRAINING LEVELS

Compiled by Steve Osborne

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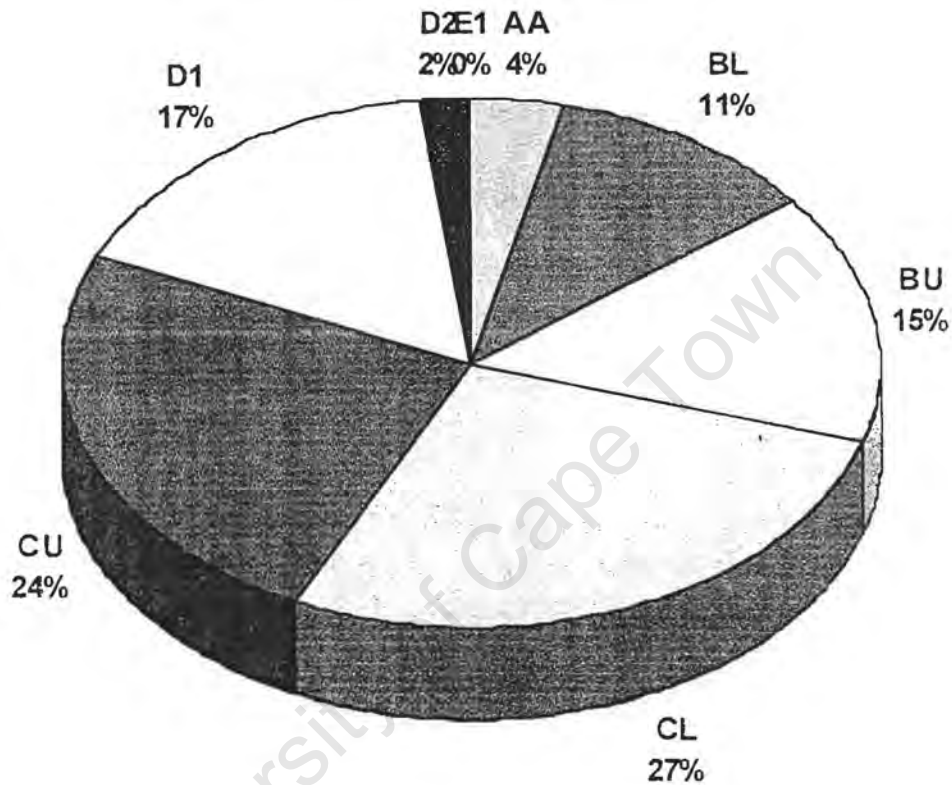
From 2000 to 2001

Costs are shown at current value



Training Department

## Grade Training Cost Comparison



Percentages are of total cost (npv)

FIGURE 21: GRADE TRAINING COSTS



# Training and Development Report

From 2000 to 2001

Department 152-01

Retail Sales



Training Department

## Skills Profile

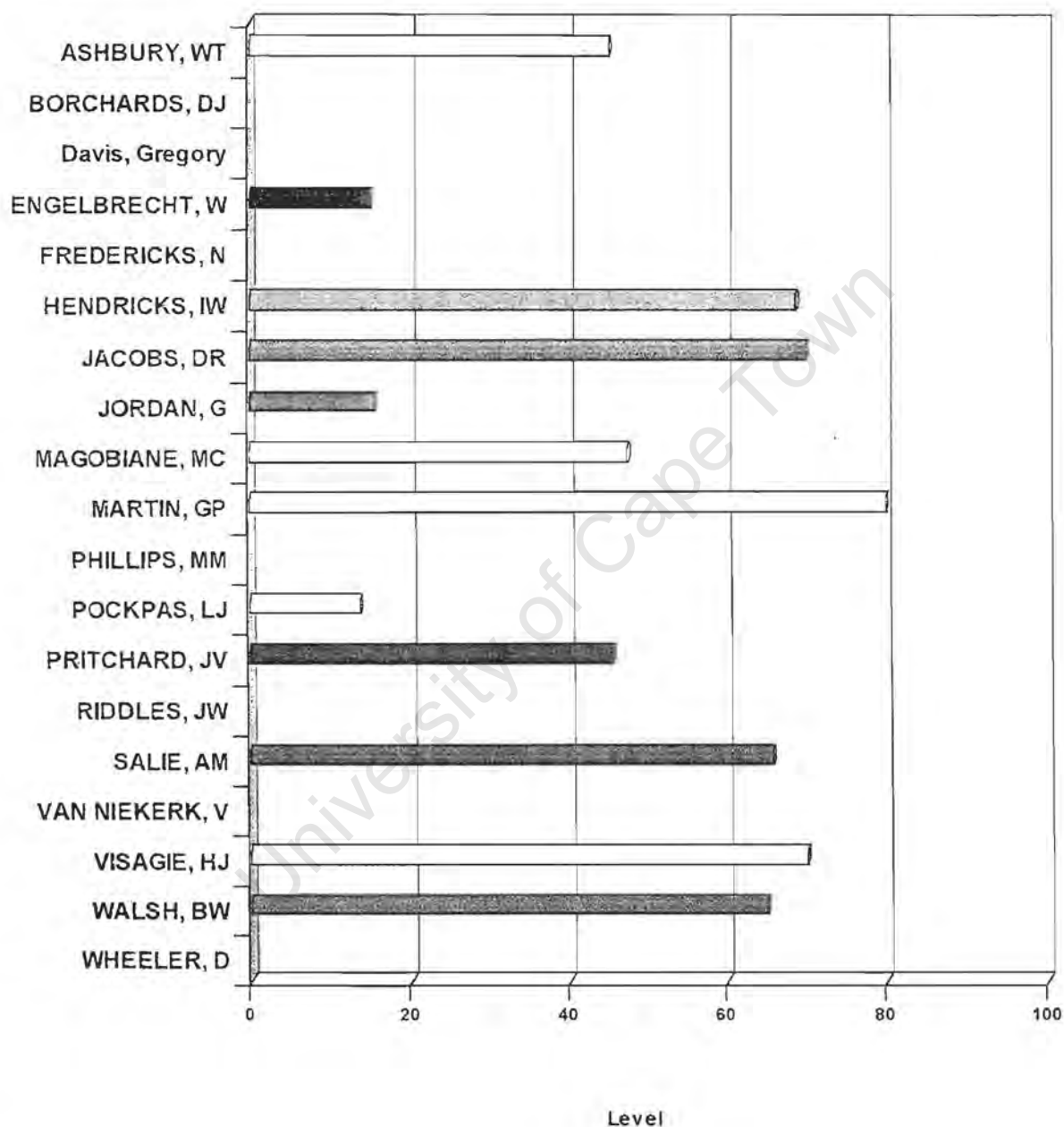


FIGURE 22: DEPARTMENT SKILLS PROFILE SUMMARY

Compiled by Steve Osborne

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# Training and Development Report

From 2000 to 2001

Costs are shown at current value



Training Department

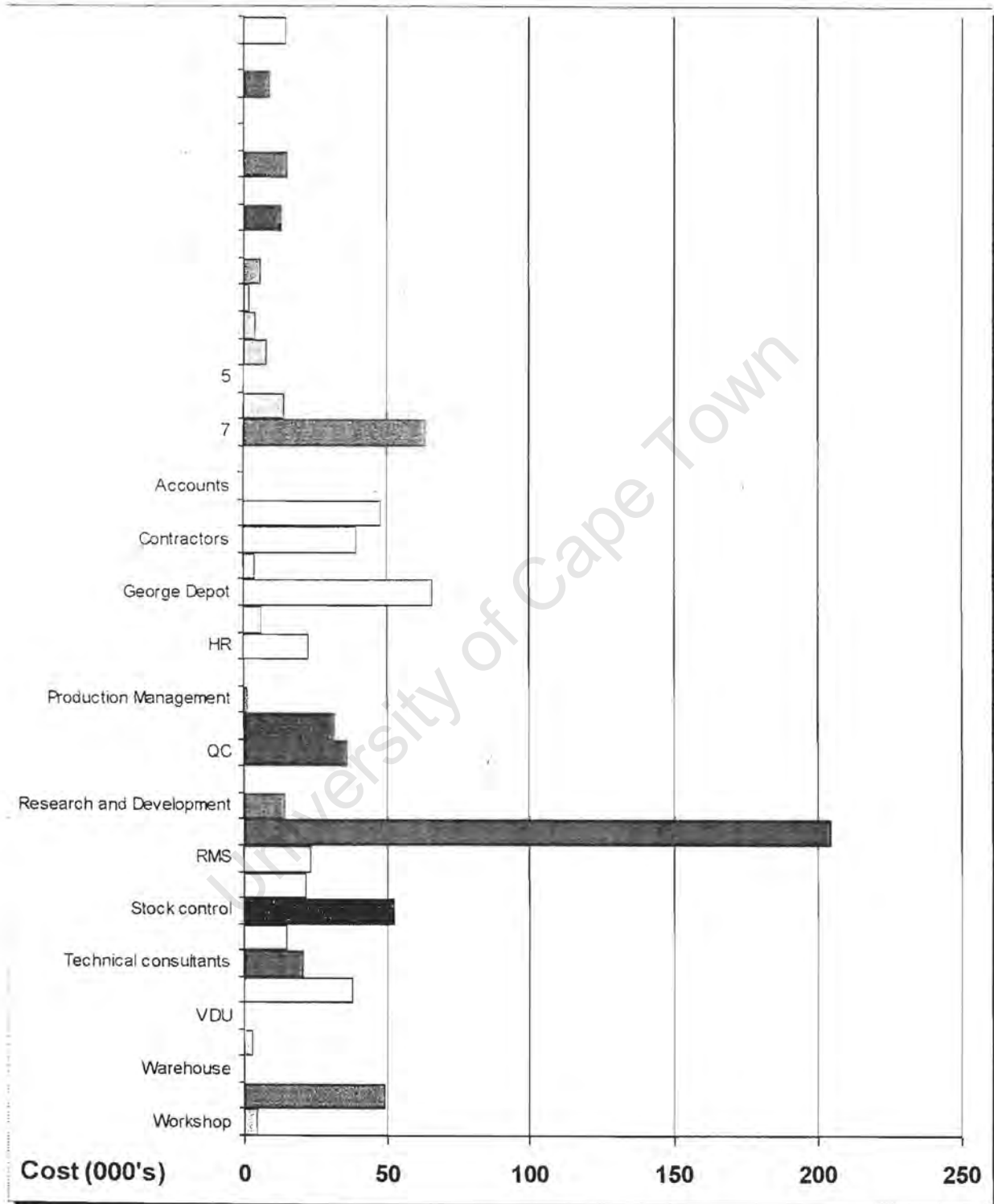


FIGURE 23: DEPARTMENTAL TRAINING COMPARISON

Compiled by Steve Osborne

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# Who has the Skill?



## Training Department

<i>Skill</i>	<i>Surname</i>	<i>Initial</i>	<i>Co. No.</i>	<i>Department</i>
--------------	----------------	----------------	----------------	-------------------

					<i>Rating</i>	<i>Weight</i>	<i>Action</i>
	SWANEPOEL	G	10920	Trade centre	0	1	
	WASMUTH	DA	10713	Technical	0	10	

### *Adaptable to company and the culture*

					<i>Rating</i>	<i>Weight</i>	<i>Action</i>
	MOHAMED	A	10644	Workshop	8	9	
	SMITH	BR	16114		4	10	

### *Follows safety instructions*

					<i>Rating</i>	<i>Weight</i>	<i>Action</i>
	AFRICA	DJ	10743	George Depot	7	10	
	BAATJES	RE	82870	Drivers	3	5	
	NJOBE	M	10821	RMS	7	8	Train
	SWARTZS	RR	82111	George Depot	6	8	

### *Coaches*

					<i>Rating</i>	<i>Weight</i>	<i>Action</i>
	KOERT	CP	9397	George Depot	2	10	
	SMITH	BR	16114		7	10	

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<i>Skill</i>	<i>Surname</i>	<i>Initial</i>	<i>Co. No.</i>	<i>Department</i>			
<i>Communication</i>					<i>Rating</i>	<i>Weight</i>	<i>Action</i>
	ADONIS	JJ	10518	Warehouse Controllers	7	10	
	ASPELING	DZ	10841	George Depot	3	10	
	BAATJES	CM	5402	Warehouse Controllers	5	10	
	BARNARD	H	10861	George Depot	7	10	
	GORDON	CP	10348	Production Planning	7	10	
	KOERT	CP	9397	George Depot	4	10	
	LANGEVELDT	K	10007	Production Planning	7	10	
	MALLOY	FC	10148	RMS	7	10	
	MARTIN	GP	10783	Retail Sales	7	10	
	NJOBE	M	10821	RMS	6	8	Train
	PRITCHARD	JV	1024	Retail Sales	7	10	
	ROSS	BC	10885	Workshop	7	9	ASSESS
	THOMAS	CX	5447	Warehouse Controllers	6	10	
	VAN DER RHEEDE	PA	10592	Warehouse Controllers	0	0	
	VOSLOO	R	10800	George Depot	0	0	

# Training Planner

From 2000 to 2003



## Training Department

### Course AAT

Surname	Initial	Co.No.	Job Title	Department	Year	Level
LEE	F	8428	SALES CLRK ORDER SNR	152-19	2002	ABETS
LEE	F	8428	SALES CLRK ORDER SNR	152-19	2003	ABETS
WILLIAMS	RH	30718	SALES CONTROLLER STOCK	152-19	2003	OPRAT

### Course ABET 2 N

Surname	Initial	Co.No.	Job Title	Department	Year	Level
ABDOL	AB	10505	RMS WEIGHER/LOADER	121-16	2000	ABETS
JASSON	J	10903	DIST DRV FORKLIFT	121-16	2000	ABETS
PERSENCE	RS	10909	PROD PLANT OPERATOR	121-16	2001	ABETS
VAN NIEKERK	MR	10913	LAB CLEANER	132-05	2000	

### Course ABET 3 E

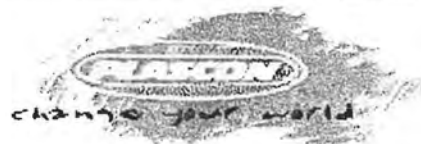
Surname	Initial	Co.No.	Job Title	Department	Year	Level
ARENDSE	MC	10540	LAB ASSISTANT SNR	132-05	2000	
PERSENCE	RS	10909	PROD PLANT OPERATOR	121-16	2001	ABETS
VAN NIEKERK	MR	10913	LAB CLEANER	132-05	2000	

### Course ABET 3 N

Surname	Initial	Co.No.	Job Title	Department	Year	Level
ABDOL	A	10806	PROD COLOUR MATCHER	121-13	2000	ABETS
ABDOL	AB	10505	RMS WEIGHER/LOADER	121-16	2000	ABETS
ARENDSE	MC	10540	LAB ASSISTANT SNR	132-05	2001	
DE KLERK	F	10897	LABELLER	121-08	2000	ABETS
GRUZA	S	82393	DIST OP MACHINE	141-06	2001	ABETS
LEE	F	8428	SALES CLRK ORDER SNR	152-19	2000	ABETS
NDYWANGU	Z	10878	MACHINE OPERATOR	121-16	2000	ABETS
PERSENCE	RS	10909	PROD PLANT OPERATOR	121-16	2003	ABETS
VAN NIEKERK	MR	10913	LAB CLEANER	132-05	2001	

# Training and Development Report

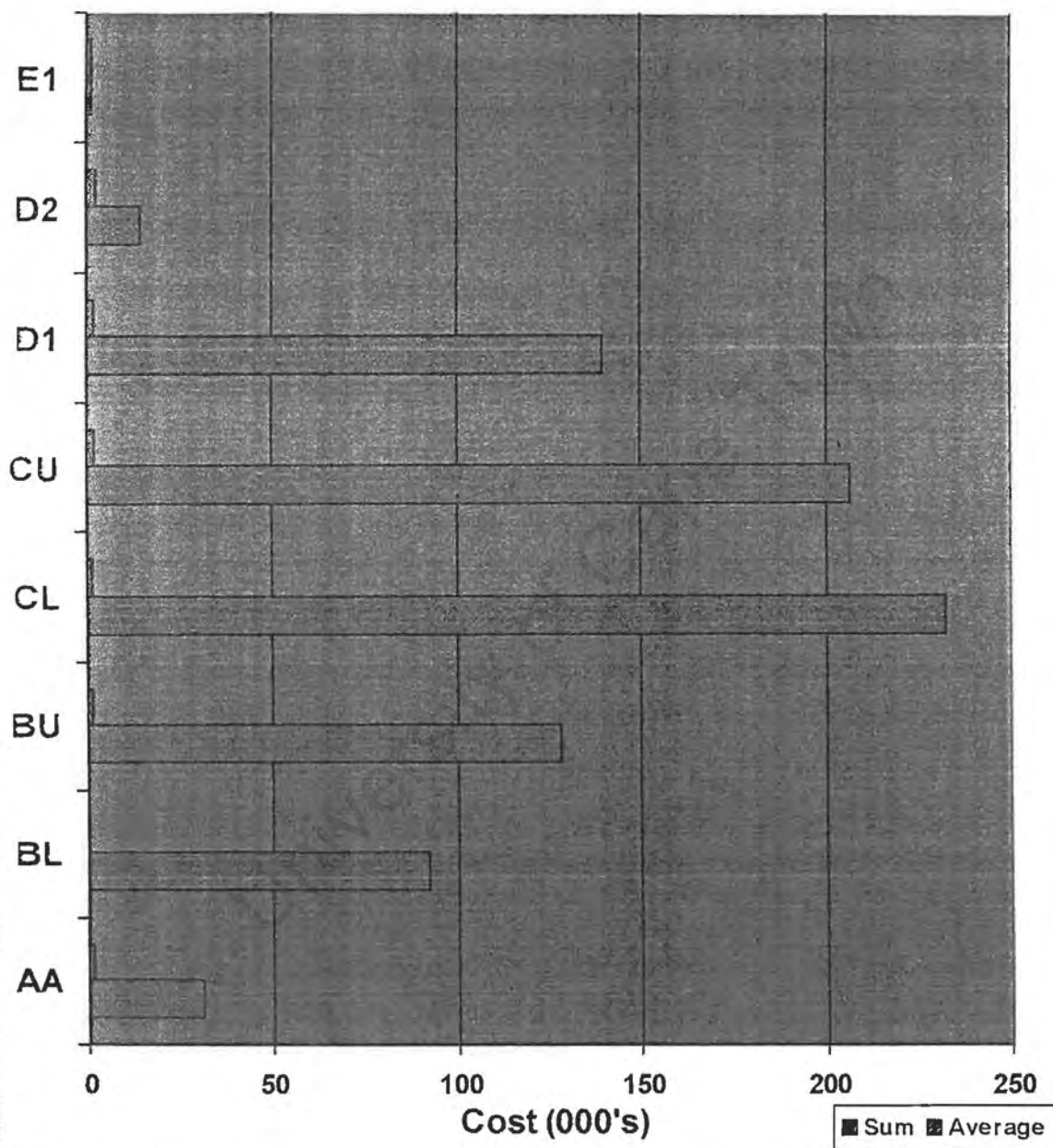
From 2000 to 2001



Costs are shown at current value

Training Department

## Grade Training Cost Comparison



## Appendix B: Skills Development and HR Systems

The following information has been sourced from the Training Manager and is presented in the form of Questions and Answers. Issues such as compiling a Skills Matrix, Job Profiles and HR systems Affected by the Skills Development Legislations are addressed.

### Learning Outcome Evidence Requirements

#### Compiling a Skills Matrix

a. What is the purpose of a Skills Matrix?

To highlight what the available skills in the organisation are.  
This gives an indication of whether the company has the capacity to achieve its strategic objectives.  
It then forms the basis for further HR development and identifying learning pathways.  
It allows skills to be aligned with NQF registered standards.

b. What process is followed to compile a Skills Matrix?

A project team ( *preferably cross-functional and representative*) with a subject matter expert , brainstorms the current pool of skills in a particular function.  
A process of outcomes analysis is used to obtain the skills and knowledge available in that function. The value chain for a function is accurately plotted. The results of the outcome analysis is then compared to the requirements of the function to obtain the skills gap.  
The skills are written up into unit standard format and the list of unit standard titles forms the skills matrix.

c. What analysis technique is used to identify the standards titles or learning outcomes?

Outcomes analysis is used to obtain the knowledge and skills required in a role.  
This technique thus enables one to identify the unit standard titles.



# Learning Outcome Evidence Requirements

## Develop Job Profiles

a.	What constitutes a job profile?		
<p>A job profile is the list of tasks performed in a certain role. It consists of a combination of skills , knowledge, outputs, customer influences, measurable outcomes and tasks. It thus details what the person is supposed to do and considers the environment in which the job is performed.</p>			
b.	How are the outputs and corresponding measurements identified for the job profile?		
<p>One identifies the outputs for the profile e.g. Drawing up a report or delivering a checked load of paint to the delivery areas, from the activities the incumbent performs. Measurements are then attached to each output e.g. Daily accurate reports or non-dented, accurately picked paint is loaded onto the pallet.</p>			
c.	Which role-players verify the job profile?		
<p>Skills Consultative Forum (SCF) Line managers Incumbents Customers. Supervisors</p>			
d.	How are the skill and knowledge components of the skills matrix linked to the job profiles?		
<p><b>Skills and knowledge are needed to perform the outputs and achieve the measurements as specified in the Job profile.</b> Information from the skills matrix is thus extended to form a Job profile. Ie. During the job profiling one assess what outputs are delivered and to what measurable standard. Also who uses the output. This thus gives an indication of what Critical Cross field outcomes are required e.g. working in a team on analysing information.</p>			
e.	How are the customers and context of the role linked to the departmental or organisational vision?	correct	not correct

Performance efficiency is determined by whether customer requirements have been achieved or not.

To deliver good service the requirements of the customers of a particular role, have to be included in the job profile.

The department thus benefits because its objectives are being achieved e.g. ***no customer complaints.***

The organisation is benefiting because its goals are being achieved e.g. ***Achieve ROI.***

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## Learning Outcome Evidence Requirements

### Compile a Workplace Skills Plan

a.	What data is required for the compilation of the skills plan?		
<p>The Strategic priorities of the company – including EE figures and approaches to handling the required skills.</p> <p>The department objectives and skills required obtaining those objectives – prioritised.</p> <p>Training records up to 31 March 2000.</p> <p>Different occupation groups and who will be aligned to which skills.</p> <p>Learning interventions to close the skill gap and obtain the company objectives.</p> <p>The cost of the interventions – internal and external providers.</p> <p>The specific individuals aligned to specific learning programs – for the period 1.4.2000 – 31.03.2001.</p> <p>The current skills matrix.</p> <p>The skills gap</p> <p>Information from SETA.</p>			
b.	What is the link between the skills matrix and the job profiles, and skills plans?		
<p>These culminate in doing an audit, which will form the basis of an individual developmental plan.</p> <p>Once the JP and skills matrix have been developed, all you need to do is determine the skills priorities which then enables you to compile a WPSP.</p> <p>By conducting a skills gap audit you identify the skills priorities.</p>			
c.	What comprises the templates required by Government Gazette to be submitted to the SETA?		
<p>i. Analysis of the workforce into categories and numbers.</p> <p>ii. Education and training levels required to achieve the company objectives.</p> <p>iii. Summary of training skills for the year 1.4.2000 – 31.3. 2001.</p> <p>iv. Number of people in different occupational levels who received training for the year ending 31.03.2000</p>			
d.	What percentage of levy may be claimed back in grants for year one for the submission and the implementation of the skills plan?		

15 % for SDF  
10 % FOR SUBMISSION OF wsp  
20 % for implementation of WPSP.

Although the grants for submission and implementation total 30%, you first have to nominate an SDF to be able to qualify for further grants.

e. What training may be included in the skills plan for year one?

All training of skills.

f. How is the skills plan linked to the organisation priorities?

The skills plan is the means by which the organisational priorities are achieved.

It is also used to track areas for development in the organisation.( SKILLS gap)

## Learning Outcome Evidence Requirements

### Identify HR Systems affected by Skills Development Legislation

a.	What are the current HR practices required within an organisation?		
Performance Measurement T&D R&S Job Design Career Pathing Remuneration Job Grading			
b.	How will the skills development legislation impact on recruitment, selection and succession planning?		
The standards for the job will be the medium for Recruitment and Selection. To progress along a certain path, one will merely have to acquire the unit standards for that pathway. It thus allows one to put a consistent pathway for anyone who is available to be placed in a certain direction.			
c.	How will the legislation impact on skills development planning, skills audits and training planning?		
It will allow all these issues to be aligned to a common standard viz. The <b>unit standard</b> . All employees will therefore be fairly treated and objectively evaluated.			
d.	What impact will the legislation have on performance management?		
The standards of performance will be known up front. An employee's performance will thus be assessed against a known set of criteria.			

e.	What new reporting and tracking requirements will the Human Resource Information System need to meet?		
<p>The company will have to keep track of :</p> <ul style="list-style-type: none"> <li>i) Which different race groups are trained in relation to occupational categories.</li> <li>ii) A training and development record for each employee.</li> <li>iii) What amount is spent on training so that the grant can be given accurately and the company is aware of what ROI is made.</li> </ul>			

f.	What allowances need to be made in the skills development plan for the impact on the HR systems?		
<ul style="list-style-type: none"> <li>i. How the Unit standard impacts on the particular HR system.</li> <li>ii. Whether WPSP warrants a rebate depends on whether the WPSP is aligned to the sector Skills Plan.</li> <li>iii. What linkages have been made to the Employment Equity plan?</li> <li>iv. To what extent is the overall Business improving?</li> <li>v. Commitment to getting objectives of the legislation met</li> </ul>			

## HR SYSTEMS - A model

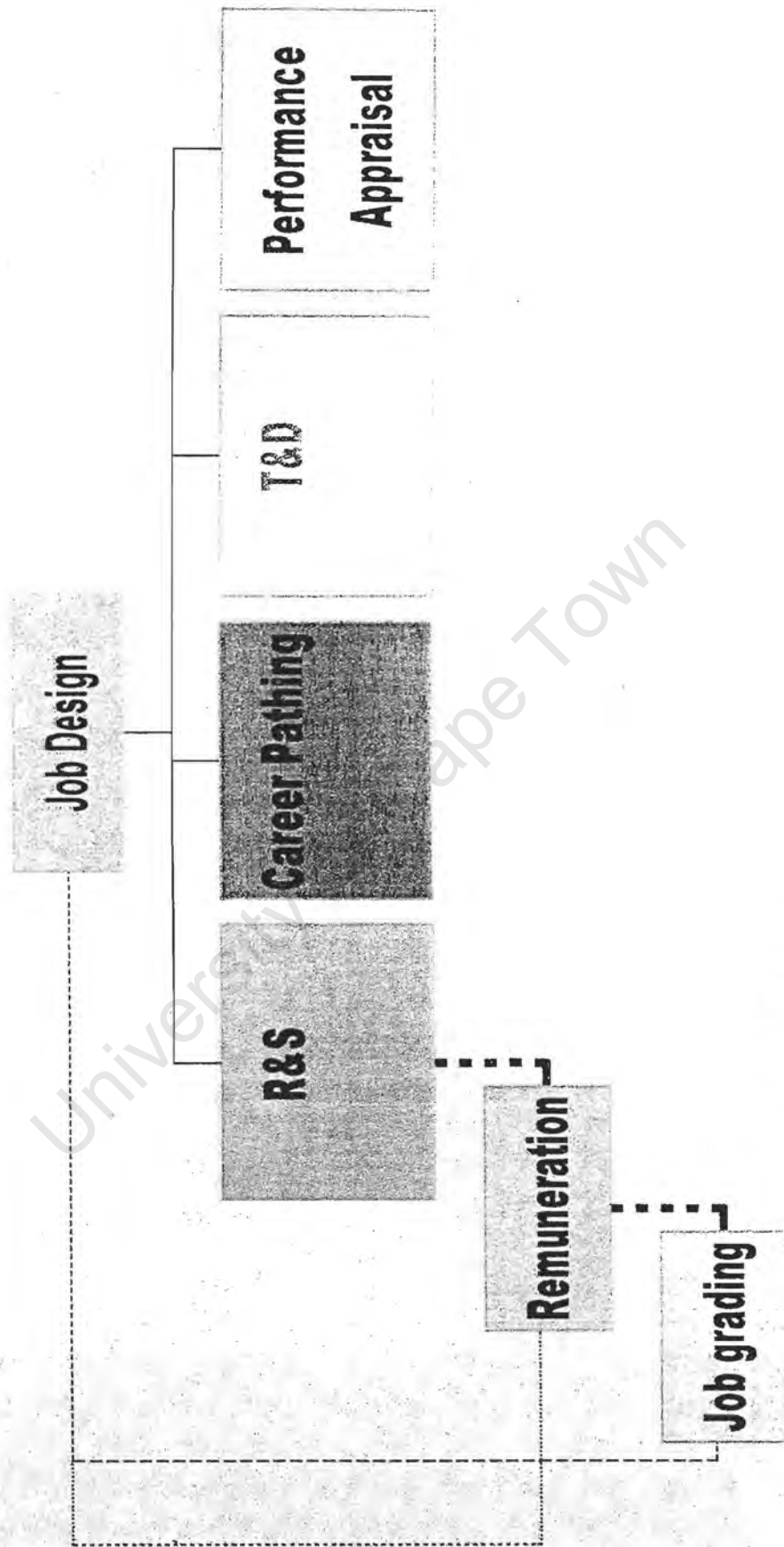


Figure : HR Systems



## Appendix C: Strategy

Employment Equity  
World Class Quality

Productivity Improvements  
CentreCFROI

### STRATEGIC OBJECTIVES

#### PROCUREMENT

- Improve SDP
- Productivity
- Accuracy

Material source

- Negotiation
- Delivery f/u
- Communication
- Plans daily activities
- Team player
- P/C Skills

#### PRODUCTION

- \* Resource align
- \* Productivity
- \* X-Skilling

Equip. knowldg

PK

#### TECHNICAL

- \* Service
- \* Formulations

Filter inform.  
Formulating

- \* Storage
- \* Customer Service
- \* Apply technology

#### FINANCE

- \* Communications
- \* Reporting

Focus on Macro  
M/S  
P/C Hardware  
Db Collections  
Bookkeeping

#### WAREHOUSE

- \* X-Skilling
- \* Service
- \* Stock Accuracy
- \* Career Pathing

SDP  
D/S  
Planning

#### Q/S/E/H/S

- \* Maintain stds.

Teamwork  
D/M  
Human Rel.

- \* Negotiates
- \* Daily planning
- \* Proactively ID problems
- \* Apply legislation

#### SALES

- \* Staff Devel.
- \* Consultants
- \* GP %
- \* Promote Plascon
- \* Promote Brands

PK  
Application Tec

#### H

- \* Leg
- \* WC

## ORGANISATIONAL SKILLS PLAN Linked to GROUP STRATEGIC OBJECTIVES

### VISION OF CAPE

1. *Export centre- high quality stds. - CUSTOMER SERVICE*  
*Environment*  
*Understand EU*

### 2. Alignment with NQF

- Unit stds. For all jobs
- Career path for everyone
- Train employees against unit stds. And learnerships which have been registered.
- Develop employees

3. Employment Equity Act – develop skills for everyone.

4. Understand Customer Service.

5. Profitable company - Maintain costs., accurate account of company , GP% - % CFROI

6. Flexible , focused working site. - PRODUCTIVITY IMPROVEMENTS

Step 1. *Departments / teams in company.*

<u>SKILL</u>	<u>TARGET</u>	<u>IMPACT OF TARGET</u>	<u>U/S</u>	<u>Strategic Obj. Align.</u>
--------------	---------------	-------------------------	------------	------------------------------

### WAREHOUSE

- |    |                 |                      |                              |
|----|-----------------|----------------------|------------------------------|
| 1. | Stacking        | 20 000 lts daily     | Delivery service to customer |
| 2. | Rail despatch   | Daily orders         | " " " "                      |
| 3. | Goods receiving | Accurate orders      | Quality of goods in stock    |
| 4. | Picking         | 10 000 Lts per day   | Prepare stock for customer   |
| 5. | Administration  | Documentation        | Accurate records             |
| 6. | Trade centre    | 24 hour service      | Customer service             |
| 7. | Order clerks    | Receive and expedite | Customer service             |

CUSTOMER SERVICE

" "

Y Y

PRODUCTIVITY IMPROVE

### FACTORY

- |    |               |                          |                          |
|----|---------------|--------------------------|--------------------------|
| 1. | Manufacturing | 3 grinds per day         | 20 000 lts per day       |
| 2. | Filling       | 20 000 lts per day       | Customer demands         |
| 3. | Labelling     | 20 000 lts per day       | Presentation to customer |
| 4. | Maintenance   | Zero downtime            | Factory functional       |
| 5. | Resin         | 5 Batches per week       | Supply factory           |
| 6. | Planning      | As per forecast for week | Customer demands         |

CUSTOMER SERVICE

CFROI

### PROCUREMENT

- |    |        |                     |                            |
|----|--------|---------------------|----------------------------|
| 1. | Buying | Factory demands     | Supply factory when needed |
| 2. | RMS    | Weigh cards for day | " " " "                    |

CUSTOMER SERVICE

PRODUCTIVITY

IMPROVE

### TECHNICAL

- |    |           |                        |                                   |
|----|-----------|------------------------|-----------------------------------|
| 1. | Testing   | Factory daily batches  | Quality product sent to warehouse |
| 2. | Assessing | Solve customer queries | Customer service                  |

CFROI

CUSTOMER SERVICE

### SALES

1.	Retail	Maintain +- 46% GP	Profit
2.	Technical services	Zero queries	Customer service
3.	Art	Signage within 5 days	" "
4.	Admin	Track trends	Support reps.
5.	Depot	0 customer complaints	Customer service

CFROI  
CUSTOMER SERVICE

PRODUCTIVITY IMPROVE

### HR

1.	Training	Upgrade skills	EEA/NQF/Quality product
2.	I/R	Zero incidents	Stable workforce
3.	Admin	Maintain records	Stable workforce

EMPLOYMENT EQUITY

CFROI

CUSTOMER SERVICE

### FINANCE

1.	Creditors	50 days	Cashflow
2.	Bookkeeping	Accurate situation of company	Profitability
3.	Distribution	Speedy responses on mail	Flexibility of site.
4.	Reception	Within 3 rings	Customer service

CFROI

CUSTOMER SERVICE

PRODUCTIVITY IMPROVEMENTS

**Appendix C: STRATEGIC SKILLS DEVELOPMENT PRIORITIES FOR THE LEVY GRANT YEAR**

Strategic Priorities	Skills Priorities (expressed as learning outcomes using SAQA fields and levels wherever possible)	Beneficiaries		Nature of learning intervention	Estimated costs	
		Occupation	Number	In -house ,ext.,formal education	In company	External
SP 1 Productivity Improvement						
* Communicate	Understand finance - budget control and compiling	Senior officials and	13	GSB - Training program		
* Expense Control	Implement briefing system	managers	13	Barlows rollout	10 000	15
*						
		Professionals				
	Deliver continuous quality	Technicians	6	CQIP	800	
	Increase GP%	Sales / sevice	12	McCORMICK		36
	Monitor absenteeism	Supervisors	8	Control absenteeism / SDP	2 400	32
	Debrief teams/ coach / mentor / reward		12	CQIP / Counselling	1200	
	Transfer accurate information	Clerks	10			
				CQIP	1200	
	Run a team - Business unit	Operators	24	teambuilding	6 000	
		Unskilled				
			TOTAL		21 600	83
			95			

Appendix C: STRATEGIC SKILLS DEVELOPMENT PRIORITIES FOR THE LEVY GRANT YEAR 1/4/2000 TO 31/3/2001

Strategic Priorities	Skills Priorities (expressed as learning outcomes using SAQA fields and levels wherever possible)	Beneficiaries		Nature of learning intervention	Estimated cost	
		Occupation	Number	In -house ,ext.,formal education	In company	External
SP 2 EMPLOYMENT EQUITY						
Fasttracking		Senior officials and				
	Business Understanding Finance for non financial	Managers	3	Mentorship Megro		6000 4000
Diversity Management	Creating Business culture		16	GLOBAL EDGE - Managing Diversity		16000
		Professionals				
Qualifications	Evaluation of Raw materials and Testing	Technicians	3	SAPMA		9000
	Creating Business Culture		10	GLOBAL EDGE - managing Diversity		2000
	Territory Management	Sales / service	3	McCoirmick		3000
	Creating Business Culture		13	Global edge		2600
	SDP	Supervisors	6	DYNA		1200
	Understanding Business Creating		10 14	GLOBAL Edge		3000 1400
	Business Culture	Clerks				
	Understanding Business Creating Business Culture	Operators	60 40	GLOBAL Edge - Managing Diversity		2000 2000

	Understanding Business Creating Business Culture	Unskilled	20 20	GLOBAL EDGE	1500 1500
			<b>TOTAL 218</b>		<b>210</b>

**STRATEGIC SKILLS DEVELOPMENT PRIORITIES FOR THE LEVY GRANT  
YEAR**

1/4/2000 TO 31/3/2001

Strategic Priorities	Skills Priorities (expressed as learning outcomes using SAQA fields and levels wherever possible)	Beneficiaries		Nature of learning intervention	Estimated cost	
		Occupation	Number	In -house ,ext.,formal education	In company	External

**SP 3 8% CFROI**

Business Aspects	Understanding drivers of Investment	Senior officials and managers	10	University of Stellenbosch Business School		1000
Expense Control						
		Professionals	1			1000
		Technicians	2			2000
		Sales / service	3			3000
		Supervisors	2			2000
		Clerks				
		Operators				
		Unskilled				
			<b>TOTAL 18</b>			<b>18</b>



**STRATEGIC SKILLS DEVELOPMENT PRIORITIES FOR THE LEVY GRANT  
YEAR**

1/4/2000 TO 31/3 /2001

Strategic Priorities	Skills Priorities (expressed as learning outcomes using SAQA fields and levels wherever possible)	Beneficiaries		Nature of learning intervention	Estimated cost	
		Occupation	Number	In -house ,ext.,formal education	In company	External
SP4 CUSTOMER SERVICE						
Astonishing Service		Senior officials and				
World Class Principles	Export Management	managers	5	External consultant		12
	Understand team functioning		8	Global edge		12
		Professionals				
Computer literacy		Technicians	6 3	Global edge Staff Room		10 6
Sales Consultants	Increase GP% Apply consultant principles	Sales / sevice	12 14	Marketing Consultant		10 40
Employment equity	Understand team functioning	Supervisors	6	Global Edge		12
	Understand team functioning	Clerks	20	Global edge		30

Self Directed Work Teams	Multi skilled Quality	Operators	32	Internal Paintmakers Program SABS		45
	Understand team functioning		16	Global edge		12
	Understand team functioning	Unskilled	30	Global Edge		25
			TOTAL 152			214

University of Cape Town

## Appendix D: Interviews

The Training Manager presented the following slide:

# HRD STRATEGY

## BUSINESS PLAN

### FLEXIBLE FOCUSED WORK SITE

- Wide range of products
- < 2000 lt batches { HDC , furniture}
- Compliment Mobeni and Luipaardsvlei
- Have employee buy-in to National HRD interventions
- Multi-skilled [flexible ]employees { ± a glorified depot }
- Back up site for bulk manufacture.
- Consider *SAFETY, ENVIRONMENT, QUALITY.*

### ALIGN COMPANY WITH THE NQF (as a strategy)

- i. Employees must be multi-skilled to allow anybody to do anything.
- ii. Have jobs in Unit standard format
- iii. Develop assessors who are the champions in their areas.
- iv. Maintain records of learning.
- v. Training must be outcomes based.
- vi. People to demonstrate competence in outcomes.
- vii. Opportunities for lifelong learning and developed to their potential.

### MEASURING CUSTOMER RESPONSE TO TRAINING

- i. *Skill transference* – from course objective – The ability to recall information in an assessment / test.

- ii. *Use of knowledge back on the job* – line manager observations.
- iii. *Impact on business*
  - less customer problems.
  - Lts/manhour improvement.
  - Reduce absenteeism rate.
  - Cutting down on expenses normally used at training eg. **Venue costs, lunches, consultant costs, and stationery.**
- iv. Assessing course participants' feeling (**customer satisfaction**) of course.

### PLASCON CAPE T&D STRATEGY:

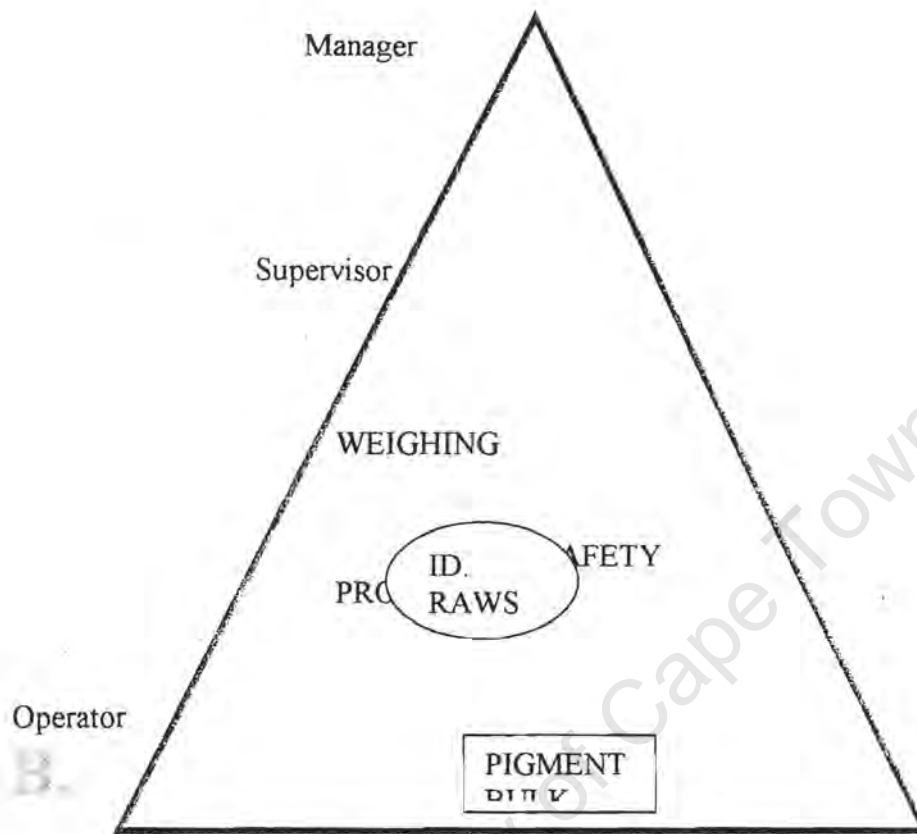
At the heart of successful implementation of the Skills Dev. Act and E/E Act lies-

#### COMPETENCE

The improvement of HUMAN RESOURCES can thus be done along the lines :

1. Have jobs written as U/S.
2. Have training programs written competency based to meet the needs of the U/S.
3. Plot careers so that employees – improve.
  - X-skilled.
4. A team approach to improvement is always better.
  - SDWT
  - CQIP
5. Customer service is included.
6. We adhere to all legal requirements – do safety training.
  - do H&S audits
7. Performance management is focal ie. Employees are measured against agreed objectives or criteria.
8. T&D takes place against those objectives / criteria.
9. Career pathing is important -

# TRIANGLE



## **T&D FOCUS IN THE COMPANY.:**

### 1). SAQA

- Facilitate access and mobility within training (career pathing).
- Enhance quality of education and training.
- Contribute to full personal development.

### 2). TECHNOLOGY is improving and developing so fast that the number of unskilled jobs is declining.

- New staffing systems thus developed.
- Future companies need skilled flexible workers.
- Companies adopting new forms of technology.

*Employees should thus be prepared so that they can accept future demands.*

T&D department must thus ensure:

- i. Continual improvement.
- ii. Attempt to get best systems in the company.
- iii. Attempt to get skills improved ASAP because of rapid changes.
- iv. Company must thus not be left behind.

### 3). LEGISLATION – E/E - Career pathing.

Position NQF in company to gain maximum advantage out of the budget.

Link Skills development with Employment Equity.

Have training done by accredited providers.

Have skills programs linked to accredited qualifications.

To get RPL, access those unit standards and do assessment.

Monitor progress of employees up the NQF.

## ***Skills Development – Toward Competence Interview Questionnaire***

**Name:** Timmy Samuels

**Position:** Production Manager

### **Competencies**

What are the Strategic Goals of Your Department?

To produce quality paint according to customer requirements

Become a low cost producer

Make maximum use of the resources at my disposal.

How are they aligned to the Goals of the Company?

They tie in very well with the strategic vision of the company, which is to produce according to the requirements that I have just mentioned.

What should be counted as competencies in your department and how should they be measured?

I think it is, working within budgetary constraints and there is a measure for that. Also to produce product at a low cost but still produce quality (pause)

Planning ability is critical.

It also has to do with HR. I'm not sure of the terms. But basically, to use people to the best advantage and also to develop them



### Skills

What are some of the skills currently being used by people in your position that must be maintained in order to be successful? Why?

Be able to meet the demands of my internal and external customers.  
To ensure that production targets are met  
Expense control and  
People development skills

What are some of the Behaviours or skills that need to be changed and/or that are currently weak? How can they be enhanced?

Supervisory and "management on the floor" skills need to be improved.  
Also, to use machines and people to the best of your ability but I think that this all comes under supervision.

Describe a product or service provided by the company that can be described as world class (that is, is perceived to be value added, innovative etc). What skills or knowledge is required to provide this service or product?

Our flagship brands are world class.  
Skills – r and D, Quality control, marketing, Paint making skills, these are what I believe are required to produce world class brands

### **Training and Development**

What is the best type of training for your operation?

On the job with theory as a backup.

Who do you Train?

My own staff but very informally. I provide the avenues for formal training.

What operational priority does training have?

30% weighted average in the average job

Is training an expense or an investment?

An Investment (this guy's to the point)

Competence Model (this refers to figure 31 shown in this report)

Overall Opinion:

I need to apply my mind, once again. The model opens up the thought processes on the various components and how to use them to ones advantage.

Is there a relationship between strategic goals and commitment /motivation?

Something must also motivate the motivation. I do agree that commitment drives strategic goals.

7

How do you measure moral?

Attendance, problematic people, general discipline. High = motivational, perform, visible in the general manner. Meeting targets. At the moment, with the upcoming retrenchments, there is not much light at the end of the tunnel.

What factors affect motivation?

What do you think of the policy of driving HR down the line?

I agree and practice it the best I can. It's about getting close to people. Get to know them better. Assist in motivating them and getting the most out of them. Know their problems and this will serve as a confidence booster and helps them to see themselves as a partner with management. This must not be done in a buck passing manner but rather with a view to achieving something. They need looking after and caring and there are rewards that can then be reaped.

Competence Model (CLD shown in figure 30)

Overall Opinion:

From weakness point of view. Seeing projects through is a weakness. If we had taken the model (CLD) and run with it to run the business, we could have been further eg people don't know what pm's are (performance measure)

Is there a relationship between strategic goals and commitment /motivation?

Strategy needs to be driven. It won't happen on it's own. Department objectives need to be put in context on the model and come after motivation

How do you measure moral?

1. IR, grievances, incidences, absenteeism
2. Talking to people but this is difficult to measure
3. See if they want to be there. But it might be for personal reasons that they look down.

What factors affect motivation?

What do you think of the policy of driving HR down the line?

This is the only way. The problem is that capacity must be built. People in the past have not taught themselves and this capacity, on the Job I mean, must be built. We don't want Closet HR managers – seeing their problems only and we need to get people to the level where they impact on the business. Performance levels must be identified along with discipline, training and taking control of on the job training. The Training Database than you built for me does have the potential to empower the managers to do this and so does the model (CLD) but both need to be driven.

## **Training and Development**

What is the best type of training for your operation?

Interaction and roll playing. The Line manager is involved in inputting skills. The person feels good because line managers are playing an interest in them. Hence we have a continuous database of skills being transferred.

Who do you Train?

Everyone

What operational priority does training have?

It's a top priority. Strategic objectives are CFROI and VBM (value based management) and EE and all are learning interventions in my opinion. At the moment all are new and there are few who understand.

Is training an expense or an investment?

It's a Huge investment.

The Line managers agree and also, Knight (MD see next interview) agrees.

## Skills

What are some of the skills currently being used by people in your position that must be maintained in order to be successful? Why?

PC skills – everything is being driven by PC nowadays.

Communication

Being part of the strategic drive. Must know what is going on from Ian (MD) , Ebrahim (Director) etc.

Knowledge of legislative trends

Relationship building especially with the SETA's.

What are some of the Behaviours or skills that need to be changed and/or that are currently weak? How can they be enhanced?

The skills come from:

1. SETA requirements
2. Strategic direction of the company
3. Personal Assessments

In the East we have the builders and in the West we have the hard systems specialists. I believe we need to find the middle ground. The Ubuntu philosophy must be expanded upon to achieve this. Caring for people is strong in the African culture and must be built upon. We must become a lot stronger and hence we must become soft on people, things like dignity are important but one must also be hard on standards like quality, safety etc.

Describe a product or service provided by the company that can be described as world class (that is, is perceived to be value added, innovative etc). What skills or knowledge is required to provide this service or product?

Marketing and Finance

Understanding future trends

A deep understanding and belief in marketing principles and trends is needed to provide world class marketing.

## ***Skills Development – Toward Competence Interview Questionnaire***

**Name:** Phillip Twynam

**Position:** Training and Development Manager

### **Competencies**

What are the Strategic Goals of Your Department?

To shape and influence change by building capacity

Um, To align all employees to add value in order to achieve a sustained international competitive standard

Getting qualifications for people. This comes from the EE and SD acts. In the new scenario, anybody can get a qualification. There is no going back and no excuses.

How are they aligned to the Goals of the Company?

100% aligned I like to think. The strategic goals are

1. Employment equity
2. Productivity Improvements
3. Customer Service
4. CFROI (Cash Flow return on Investment)
5. Line Management responsible for their resources.

The Training and development strategy is aligned with these goals and this is important. We train for multi Skilling, some of it anyhow, which will lead to productivity improvements. Also, with the new database (referring to the Skills database described in this report), we can easily see how the training funds are being spent on Employment equity in the workplace.

What should be counted as competencies in your department and how should they be measured?

Training. For me, how many hours spent per person per year and what percentage of the budget has been used and what improvement has been made to the company. Can line manager's council, mentor etc and if they can't we need to equip them. Line Managers have the capacity to access, that is skills assess, their team members. Nobody has the capacity to do this (better than them) but measurement is not possible as nobody has been trained as an accessor.

To see how the training department impacts on the skills plan



## ***Skills Development – Toward Competence Interview Questionnaire***

**Name:** I Knight

**Position:** Operations Director for Africa

### **Competencies**

What are the Strategic Goals of Your Department?

The department becomes part of the Export venture and so the strategic goals are those of the export venture as stated on the web site.

Extract from Web Site developed for the export venture (see main body of report)

### **Our Mission**

**To provide World Class Coatings products and services at globally competitive prices.**

How are they aligned to the Goals of the Company?

I would like to believe that those are the goals of the group. We also need to improve efficiencies towards becoming a low cost manufacturer. Being able to export quality products anywhere in the globe.

What should be counted as competencies in your department and how should they be measured?

With the scope of the equipment and materials that we currently have, I think that the ability to cost effectively utilise those in producing an acceptable quality of the desired paint is a competence. Flexibility – the ability to react to customer demands quickly. The competence of becoming a leading company (refers again to the Export web site)

## Skills

What are some of the skills currently being used by people in your position that must be maintained in order to be successful? Why?

Stock management and quality management. There are skills within skills.

Financial Paint making

HR skills are the most important. The things that Christie (group MD) calls the warm and fuzzies.

What are some of the Behaviours or skills that need to be changed and/or that are currently weak? How can they be enhanced?

People with bad commitment eg timekeeping.

We have to become company goal focussed as opposed to internally individually focussed and this means teamwork.

Describe a product or service provided by the company that can be described as world class (that is, is perceived to be value added, innovative etc). What skills or knowledge is required to provide this service or product?

Tint bases. The ability to produce high quality tint bases. The ability to follow procedure and formulations. Very much discipline. A full understanding of the genesis of the product i.e. from bench to batch to grave leads to a full understanding of the key parameters, for example grinding time is sometimes a key parameter in manufacturing.

## Training and Development

What is the best type of training for your operation?

Outcomes based. I don't want people who can regurgitate but rather people who can do.

Who do you Train?

Yes I do train from a mentoring point of view and like to believe that I train the managers.

What operational priority does training have?

In theory this must come first.

Is training an expense or an investment?

Investment but when push come to shove it's the first to be cut but it should be viewed as an investment.

### Competence Model

#### Overall Opinion:

I was involved and hence I think it hangs together quite well. It's a holistic model. Mentorship is taking place and this is in the multiskilling drive.

Is there a relationship between strategic goals and commitment /motivation?

The strategic goals must have motivation behind them definitely. At every EDP, Surgey (Group CEO) has told us not to think that strategy is the domain of the executives. We need to move away from the "tell" mentality to the "ask" mentality by asking people what they think we should do and where we are going and this will also empower staff.

How do you measure moral?

In the level of achievement of strategic goals. Perhaps there are milestones within that for example 15% of 50% in 5 years.

What factors affect motivation?

What do you think of the policy of driving HR down the line?

Well it's my strategy so I should believe in it.

### **Ian Knight – Operations Director (1<sup>st</sup> interview)**

1). What are the core business activities at the moment?

What is meant by core?. There are no vendor supplied products. All activities are conducted by Plascon. Resin manufacture and solvent filling could be outsourced.

2). What should be the core activities?

Lowest cost producer for local market.

4). What has made Plascon Cape what it is today?

Flexibility. Quality of workforce. The entire package is flexible, not only the factory, but also the services such as Q.C etc. There is also a large amount of product and manufacturing knowledge on the site.

5). Should the future environment be unfavourable, how would you sustain the business?

Outsource/management buyout

6). How are long term objectives set?

Group production rationalisation plan

7). How is policy set?

Group and corporate

8). What are your concerns around this business (production unit)?

It may be cheaper to source from Gauteng and have only a depot.

9). Consider the situation in the future when you will have moved on, what do you hope to leave behind that people will associate with your period in office?

Empowerment. Synergy of team. No loss upon leaving.

### **Timmy Samuels – Production Manager**

1). What should be the core activities?

To produce in line with the demand placed on the factory by sales.

-Milling, finishing, Q.C, Raw materials procurement

2). What has made Plascon Cape what it is today?

Flexibility. Response Time

3). Should the future environment be unfavorable, how would you sustain the business?

Make a bulk white production unit and taper accordingly. Being Plascon, the unit must work within Plascon and source further production from within.

Flexibility is the key to sustainability. Historically, the experience is already here.

4). How are long term objectives set?

The bigger picture must be taken into account via the customer.

5). Consider the situation in the future when you will have moved on, what do you hope to leave behind that people will associate with your period in office? Change the culture of the people to one of "bettering themselves".

**Solly Solker – Raw Materials manager**

**Q. Why has this unit survived?**

- Relatively free from large scale industrial action
- Locality of port yields import/export opportunities.
- The people are proactive i.e. make a plan. "They say they can't do it, we will" (they here means other Plascon centres)
- Raw materials suppliers that are represented in Gauteng are replicated in the Cape.
- Flexible management. Not rigid. Cohesive teams.

**Robbie Paulsen – Risk manager**

**Q. Why has this unit survived?**

- Flexibility of manufacturing facilities.
- Culture of the workforce. Not militant
- High level of staff commitment. "go the extra mile".
- Management style is open door.
- Team spirit-"pull out the stops"

**Cliffie Gordon – Oil Plant Production Controller**

**Q. Why has this unit survived?**

- Flexibility of the site.
- Expertise on the site.

**Dave Wasmuth – Q.C Manager**

**Q. Why has this unit survived?**

- People – willing to get things done.
- High flexibility but limited volume
- Mismanagement in relocation of products
- More highly educated workforce

**Piet Breda – Water Plant Controller**

**Q. Why has this unit survived?**

- Disciplined staff who are willing to get things done.
- High First time right ratio.
- The ability of staff to put differences aside and make paint.

**Norman Armstrong – Sales Manager**

Q. What has sustained the Cape Town production facility thusfar?

- The ordering and stock situation. The C.T factory is small and versatile enough to plug holes in this situation.
- Many products are difficult to forecast. C.T is a quick reaction factory, especially on whites.

Q. What causes the stock problems that you mentioned above.

- Plascon's attempts at J.I.T have failed. The month-to-month product mix is too high to forecast accurately. The forecasting in many cases uses only history, thus making ordering difficult. 1700 products being made is too high to get accurate forecasts.

Q. What are your concerns about the future?

- The threat posed by an accounting type attitude at JHB. A number of bad years will force a relook at the C.T factory.
- With a factory at C.T, there is a lot of expertise on the site. This enables sales people to become paint people and there is great interaction due to the small manufacturing site, which does not happen in JHB. This is one of the strengths of the C.T site.

Q. What do you think of the "Be all things to all men" approach to the business and is this prevalent at C.T?

- Yes, this does happen. The loyalty factor is important. It is important to form partnerships with customers. We do not hard sell.
- This helps to form long term relationships.
- We 'can only sell something to the customer if he sees it on the shelf'. This makes shelf space at the stores very critical to us.

## System Meta-language

The following is a list of commonly used phrases at the factory. These phrases were also surfaced during the interviews.

- 'One hand washes the other' - various
- 'You get me' - production planner
- 'Go the extra mile' - various
- 'Pull out the stops' - Risk manager
- 'Open door policy' - Various
- 'Too much red tape' - Production supervisor
- 'They say they can't do it, we will' - Q.C manager
- 'You know what I mean' - various
- 'No problem' - Production supervisor
- 'The pipeline is empty' - Managing director

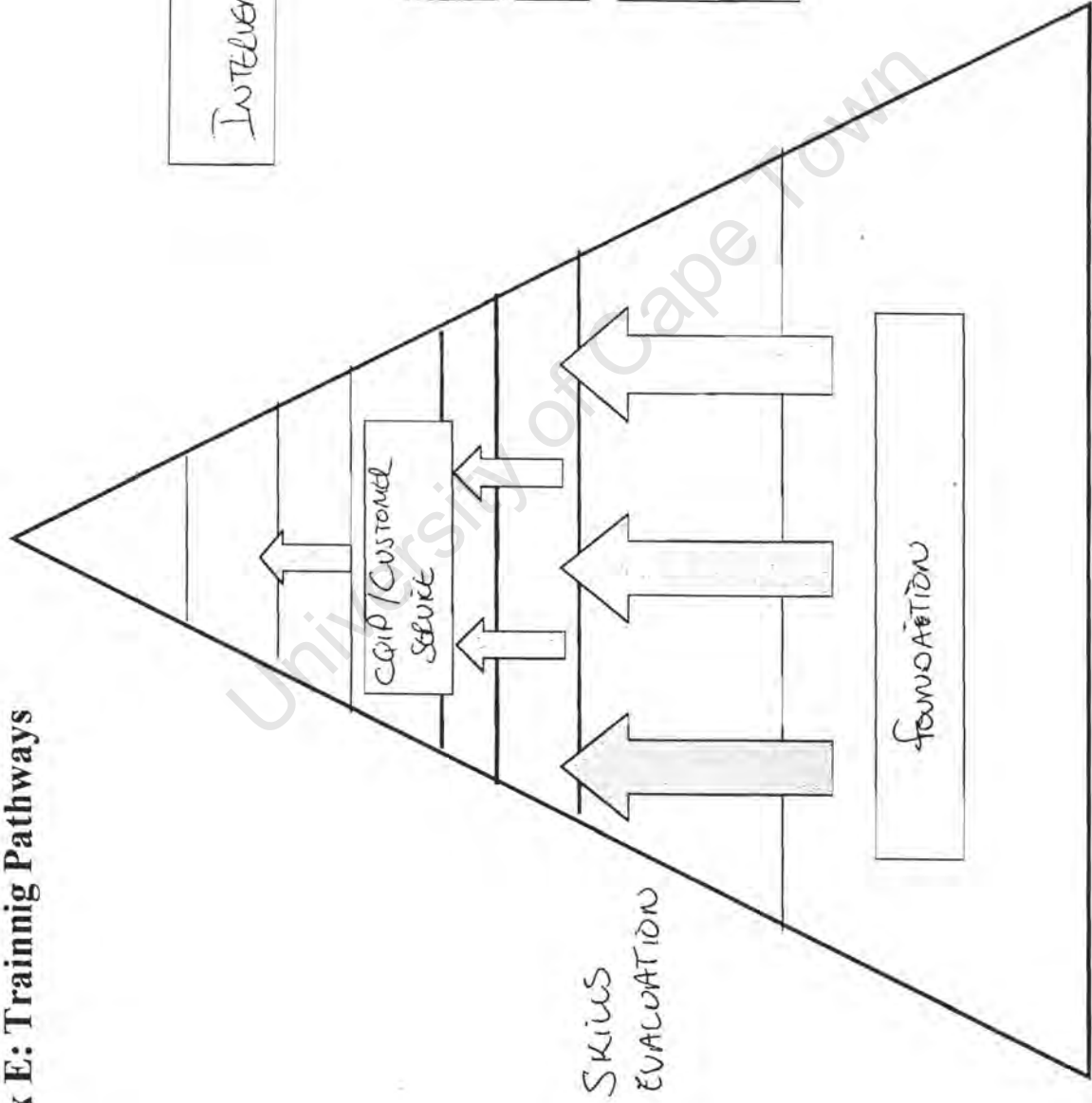


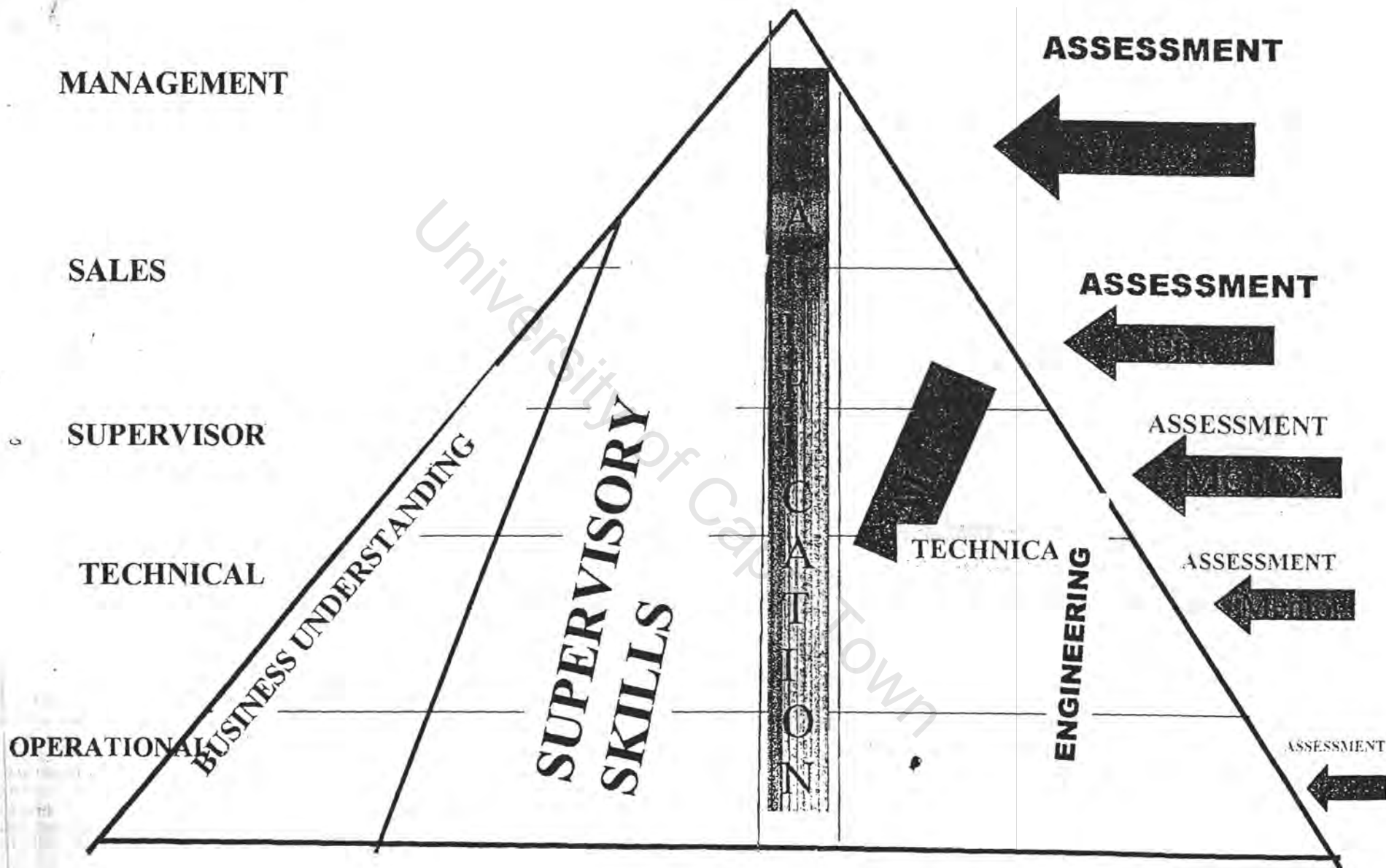
## **The Relationship Between Employment Equity and Skill Development.**

The Employment Equity Act has been recently passed and is related to the Skills Development Act in that the Skills Development Act rewards employers who actively promote the development of previously disadvantaged groups in the country by training. At the request of the Training Manager, this aspect was also included in the Training Database and the results are shown in the Job Category Report on the following page.

The types of Designated Groups as specified by the Employment Equity act are given at the top of the report. The amount of training spend is categorised into the levels as required by the Skills Development Act, as shown by the first column. Thus the table indicates, for a specified period, what type of training is taking place with respect to the various designated groups, as stipulated by the EE act. The results show that the majority of training spend is taking place on Coloured Males at Sales and Supervisory levels of the work force. From the point of view of the Skills Development Levy, only the Supervisory training spend portion of the above mentioned example could be reclaimed from the Skills levy. This is presented by way of example and the intention is not to get drawn into the specifics of the results but rather to focus on the output of the database and the relationship of this output to competencies, which will be discussed later. The training spend on groups denote as "designated" (non white and females) and "undesignated" (pale males) by the Employment equity act is shown graphically in figures 29 and 30.

## Appendix E: Trainning Pathways





## **Appendix G : Job Profiles**

**Brainstormed Skills and Knowledge required to be efficient in the role:**

<b><u>SKILLS</u></b>	<b><u>KNOWLEDGE</u></b>	<b><u>OUTCOME</u></b>	<b><u>Unit standard.</u></b>
Select the correct goods	Understand 2-pack systems	Satisfied customer	<i>Prepares goods for delivery</i>
<i>Core handling procedure</i>	<i>Core- Product knowledge</i>		
Read codes , colour and different pack sizes.	Machine operating procedures. Reading.	Correct goods loaded	<i>ABET 3 reading</i>
<i>Fundamental reading skills</i>	<i>Core – license course</i>		
Communicate with different parties.	Reason why non-conforming stock should be quarantined	Create awareness of stock situation. Work effectively with others as a member of a team.	<i>Pass along information</i>
<i>Elective communication</i>	<i>Core- Product knowledge</i>		
Calculate number of tins on a pallet.	Quality	Correct goods loaded	<i>Perform mathematical operations</i>
<i>Fundamental Numeracy</i>	<i>Elective</i>		
Transport goods safely on a pallet jack to the identified loading area.	Safety procedures Use of PPE	Customer satisfied	Operate a pallet jack
<i>Core handling procedures</i>	<i>Fundamental- Lifeskills.</i>		
	Stock rotation		
	Core- product		

	knowledge.		
	Know layout of the Warehouse	Goods picked timeously	<i>Prepare goods for delivery</i>
<b>Apply correct lifting techniques</b>		Prevent injuries	<i>Prepare goods for delivery</i>

*Ptwynam*

**S.Osborne**

**J.KOOPMAN**

*G.Echardt*

**Skills Consultative Forum:** .....

**Department Head:** .....B.SMITH

I.APRIL

**Incumbent:** .....

**DATE:** ..... 13 August 1999



change your world

## JOB PROFILE

**Strategic Goals:** i. ROI Improvement processes. ii. Customer Service iii. Employment Equity and Staff Development iv. Productivity V. Convert sales to Business Consultants.

**Name:** Phillip Twynam  
Resources.

**Functional Area:** Human

**Job Title:** Manpower Development Manager

**Grade:** D1

**Reports to:** Operations Director

**Issue Date:** 4 August 2000  
2001

**Review date:** 12 January

**Context of role:** To improve employee competence on Cape site.

**Purpose of role:** To align training interventions with site objectives thereby achieving legislative requirements.

### CUSTOMERS

### CUSTOMER RELATIONSHIPS.

#### Internal

- Line managers

Give continuous reports and advice.

- Employees

Discuss training programs and standards required.

- Head office

Present timeous reports.

### **External**

- SETA { CHIETA }

Liaise regularly by e-mail and telephone.

### **Performance specification:**

#### **Output ( What I provide to my customers ).**

#### **Output quality requirements and measurements**

##### *1. Report on training progress*

1.1 Assess if learner met course outcomes.

1.1 Learner is assessed within 1 week if competent / NYC.

1.2 Determine level of efficiency ( performance rating)

1.2 Post rating onto database within 1 week.

1.3 Indicate impact on company and departmental objectives.

1.3 Send evaluation sheet to line manager and learner for comments. Record impact and convert to savings.

1.4 Ensure assessments are fair and consistent.

1.4 Principles of QMS policy are used so that fairness is visible.

##### *2. Improve employee competence*

2.1 Use appropriate adult learning methodology.

2.1 Learners to be made at ease and supported immediately. OB principles.

2.2 Give feedback on performance and highlight improvements.

2.2 Allocate % and recommend how to improve on the post evaluation



2.3 Prepare adequately for the assessment.  
training

2.4 Conduct research on what training is done.  
financial year.

3. *Deliver report electronically.*

3.1 On due date.  
month

3.2 Information to be accurate.

4. *Compile WPSP.*

4.1 Gather information on sector and company development trends

4.2 Do a skills audit  
skill levels.

4.3 Align different training interventions to the specific job levels

4.4 Compile a list of skills for all the functions.

4.5 Advise management on learning interventions.

4.6 Co-ordinate Skills Development activities.  
Manager.

4.7 Consolidate the WPSP  
supplied.

2.3 Assign mentor and explain support structure. Refer to  
manual on how RPL is conducted.

2.4 Update training resources at the beginning of each

Evaluate training spend on the 23<sup>rd</sup> of each month.

3.1 Information is forwarded in the required format on 25<sup>th</sup> of

3.2 An explanation must be given for any deviations from the  
training budget and courses planned.

4.1 The SETA is consulted and information used.

4.2 Employees are interviewed to determine current

4.3 Use SETA and company objectives to determine specific  
training needs.

4.4 Use skills extraction brainstorming sessions to determine the  
different skills in each function

4.5 Requirements as per the SDA are explained to line managers.

4.6 Linkage with E/E is maintained and signed by EE

4.7 All the information is inserted on the SETA software

WPSP.

5. *Implement the WPSP.*

5.1 Administer database

WPSP.

5.2 Facilitate skill compilation participation

5.3 Prioritise implementation projects.

approach.

5.4 Recommend training interventions to achieve goals of WPSP. budget .

constituents.

6. *Design a QMS*

6.1 Develop indicators to measure progress of the WPSP. system.

6.2 Set up QMS that conforms to Education and training needs. training.

6.3 Monitor effectiveness of the training linked to strategic goals.

The Skill Consultative Forum has signed off the

5.1 Each employee has a learning program on the database. Learning program is used to assess the effectiveness of the

*Remember sensitivity and confidentiality.*

5.2 Training committee (SCF) is established and consulted on process

5.3 Areas of greatest company benefit are tackled first. Refer to records of information gathering phase. *Be flexible in*

5.4 Draw from approved list of providers. Consult SCF on

*Consider integrity of SCF for feedback to*

*Demonstrate support to learners by explaining mentor*

6.2 ETQA accreditation acquired. Components of a Quality system eg. Traceability of individual company goals and individual

*Creativity and support must be critical.*

6.3 recognition given to learners within 2 weeks of completion. *Honest results given. Openness to suggestions.*

- Patience

\* Patience is needed to understand personal problems

Skills Consultative Forum:

- S. Osborne*
- G. Echardt*

Operations Director: **I. Knight**

Date: 16 August 2000.

University of Cape Town

## Appendix G: Job Profiling

### Identified Functional Area:

#### **WAREHOUSE**

##### Purpose of this area:

To supply customers with goods within agreed standards { *Lead time and quality* }

##### Reason for existence:

**CUSTOMER SERVICE – A strategic priority.**

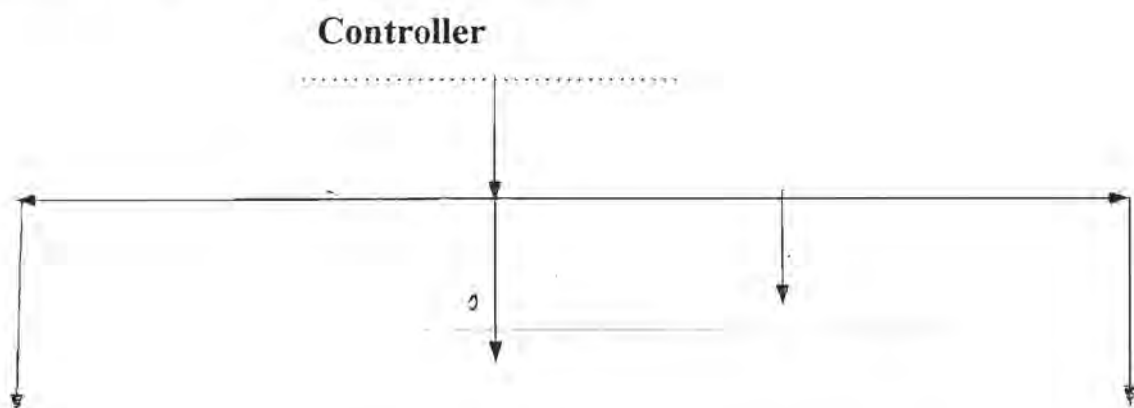
##### How does it contribute to the overall purpose of the business?:

- i. Attends to queries of customers
- ii. Maintains an orderly stacking facility.
- iii. Goods are received correctly and their location expedited.
- iv. Customer returns run smoothly.
- v. Team spirit is maintained and goods picked accurately.

##### List Roles in this Functional area:

- |                       |                       |
|-----------------------|-----------------------|
| i. Picker             | ii. Checker           |
| iii. Stacker          | iv. Forklift Operator |
| v. Distribution Clerk | vi. Controller        |
| vii. Manager          | viii. VDU Operator.   |
| ix.                   | x.                    |

### Individual Key Roles - PICKER



Picking  
Stacking

Forklift

Admin

**Purpose of ROLE:**

To get goods off the shelves and placed into a loading area.  
Goods must reflect what is typed on the issuing documents.  
**How it contributes to success of the business:**

Delivery of Astonishing service.

University of Cape Town

## Overview of Legislation



**TABLE 6**  
**PARADIGMATIC SHIFT FROM TRANSMISSION MODELS OF TEACHING AND LEARNING TO OUTCOMES-BASED EDUCATION AND TRAINING**

	OLD TRANSMISSION MODEL OF LEARNING	NEW OUTCOMES-BASED MODEL OF LEARNING
<b>The learner:</b>	Passive learners.	Active learners.
<b>Assessment:</b>	Graded. Exam-driven Exclusionary.	Continuous assessment; learners are assessed on an on-going basis.
<b>Role of the teacher:</b>	Teacher-centred, textbook bound	Learner-centred, teacher as facilitator; teacher constantly using group work and learn work.
<b>Curriculum framework:</b>	Syllabus seen as rigid and non-negotiable. Emphasis on what teacher hopes to achieve	Learning programmes seen as guides that allow teachers to be innovative and creative in designing programmes. Emphasis on outcomes – what the learner becomes and understands.
<b>Time frames and learner pacing:</b>	Content placed into rigid time frames.	Flexible time frames allow learners to work at their own pace.

(Source: Department of Education 1997a: 6-7)

#### Credit accumulation and transfer schemes

The progressiveness of competency and outcomes approaches is also derived through their association with flexible modular approaches to curriculum which allow learners the opportunity over time to accumulate credits across a range of education and training providers. Three key characteristics of credit accumulation and transfer schemes (CATS) can be identified:

- They facilitate movement across all the divisions within ET.
- They provide a flexible framework in which there can be maximum student choice and exploration, pacing of learning as well as a degree of specialisation. This entails opening up the curriculum to new groups of students who would previously not have been in formal learning, especially in further and higher education and training.
- They allow for the development of new forms of knowledge that reflect new social developments (media studies, urban studies, performing arts, and economic awareness). These developments pose new possibilities for relating the vocational and the academic in the curriculum (Spours 1988: 10).

In his paper on changes in knowledge production and dissemination, Scott (1995: 74-75) analyses the impact of CATS on higher education:

Modular-degree schemes, CATS and outcomes-based assessments embody different values than those which have been dominant in many higher education systems – or, at any rate, their elite segments. In place of sustained academic commitment a step-by-step, and student friendly, approach to higher education is offered. Multiple points of entry and exit are opened without regard to the academic symmetry of the whole. In place of grand organic interpretations of knowledge, a pattern of academic progression is provided in which connections, between topics and levels, are pragmatically derived rather than cognitively prescribed. And, in place of socially exclusive accounts of disciplinary and professional cultures, a more diffuse 'college culture' is offered.

Scott argues that CATS makes access easier because it enables a much wider range of indicative factors to be taken into account in considering the eligibility of students rather than simply their success in end-of-year exams. Secondly, CATS reduces the risk and stigma of failure by providing multiple exit points that can be certificated. And lastly, students can 'grow' their own academic interests and, in so doing, are less likely to be trapped in academic fields for which they have limited aptitude.

#### Critical thinking and democratic nationhood

OBET in South Africa also places a strong emphasis on the development of critical thinking skills. Curriculum 2005 makes this pedagogic objective explicit:

Learning programmes should promote learners' ability to think logically and analytically as well as holistically and laterally. This includes an acknowledgement of the provisional, contested and changing nature of knowledge and of the need to balance independent, individualised thinking with social responsibility and the ability to function as part of a group, community or society. (Department of Education 1997a: 10)

Radical education discourses are also defined by their appeals to a common nationhood and citizenry in contrast to the social class stratification that traditional schooling typically reinforces. This emphasis is evident in Curriculum 2005 which defines nation building and non-discrimination as key principles of the new ET system.

ET should promote the development of a national identity and an awareness of South Africa's role and responsibility with regard to Africa and the rest of the world. Learning programmes should, therefore, encourage the development of

- mutual respect for diverse religious and value systems, cultural and language traditions;
- multilingualism and informed choices regarding the language/s of learning; and
- co-operation, civic responsibility and the ability to participate in all aspects of society. (Department of Education 1997a: 9)

#### Participatory governance

Curriculum design in OBET (as in radical pedagogic traditions) will be transparent and participatory, incorporating the efforts of all stakeholders: parents, teachers, education authorities, experts and the learners themselves. The curriculum framework is provisional, with piloting, experimentation and adaptation occurring throughout. Curriculum frameworks will vary from place to place as the process becomes more flexible and responsive to diverse community needs. (Department of Education 1997a).

#### Seamless learning

The cumulative impact of all these elements is to create an environment for seamless and successful learning, with few boundaries, barriers or exclusionary constraints hindering further learning. This idealism of seamless learning is borne out in Curriculum 2005 when describing the benefits of an outcomes-based NOF model:

- Learning is recognised whether it takes place in formal or informal settings.
- Learners are able to move between the education and working environments.
- Areas of learning are connected to each other to enable learners to build on what they learn as they move from one learning situation to another.
- Credits and qualifications are easily transferable from one learning situation to another. (Department of Education 1997b: 5)

The notions of ease of transfer from one learning context to another implicit in seamless learning is perhaps the most appealing feature of the radical discourse of OBET, but it also represents its most problematic feature. The next section will raise some of OBET's limitations.



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# DEPARTMENT OF LABOUR

## Legislation & Policy

## Skills Development Act - FAQ's

About the department

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### What employers need to know about the Skills Development Levy

These questions and answers provide information about employers' obligations in terms of the Skills Development Act, 1998, and the Skills Development Levies Act, 1999; and explain what the levy grant system is all about.

### What is the purpose of this scheme?

The short supply of skilled staff is a serious obstacle to the competitiveness of industry in South Africa. The levy grant scheme aims to expand the knowledge and competencies of the labour force resulting in improvements in employability and productivity. This will be achieved through new approaches to planning for training, learning programmes, incentives and an improved employment service. If you participate fully in the scheme you will reap the benefits of a better skilled and more productive workforce.

### Why pay towards this levy grant scheme?

The payment towards this levy grant scheme is legislated in terms of the Skills Development Levies Act. The intention is to stimulate skills development by enabling employers to reclaim some expenditure on skills development initiatives.

### Who must pay the levy?

Every employer in South Africa who:

- Is registered with SARS (South African Revenue Services) for PAYE

OR

- Has an annual payroll in excess of R250 000.

### Who must register?

Every employer who is liable to pay the levy must register for the payment of the levy with SARS by completing a registration form (form SDL 101 available from all SARS offices).

In order to register, you (the employer) must:

- Obtain a registration form (SDL 101) from any SARS office, if not received by mail.
- Choose from a list of registered Sector Education and Training Authorities (SETAs) as indicated in the SETA classification guide provided with the registration form, a (one) SETA most representative of your activities.

### What is a SETA?

SETA stands for Sector Education and Training Authority. Up to 27 SETAs are to be established during March 2000 and will cover all sectors in South Africa, including government. The members of a SETA include employers, trade unions, government departments and bargaining councils where relevant, from each industrial sector.

### How do I know which SETA applies to me as an employer?

SARS will provide you in January 2000 with a list of proposed SETAs and their scope of coverage. You will be required to make a choice from the list of SETAs of the SETA that is most representative of your core business.

### How will I know what to do in order to comply with the requirements?

Your SETA, once established, will send you all the information on the scheme including the requirements and timetable for action by you. You will be supplied with contact details of employees of the SETA who are available to help you maximise the benefits of the scheme.

### What if I do not hear from the SETA?

If you have not heard anything by 1 October 2000 contact the Executive Officer, National Skills Authority (NSA) at the Department of Labour, Laboria House, 215 Schoeman Street, Pretoria (Private Bag X117, Pretoria, 0001).

### Is any employer exempt from the payment of the levy?

Yes. The exemptions are applicable if certain provisions are met. Application for such exemptions are contained in the SDL 101 form, issued by the Commissioner of SARS, who will ultimately adjudicate whether you qualify for exemption or not.

### Where (to whom) are levies payable?

Levies are payable to the South African Revenue Service, which acts as a collecting agency for the Department of Labour and SETAs.

### How are levies payable?

Each month SARS will provide all registered employers with a "Return for remittance" form (SDL 201), which enables you to calculate the amount payable and effect payment.

### What amount is payable?

The amount payable will be calculated as follows:

- 1st year (1 April 2000 – 31 March 2001):

0,5% (half of a percent) of the total amount of remuneration paid to employees. Any prescribed exclusions that are not leviable are subtracted from the total remuneration.

- 2nd year and onwards: 1% (one percent) of the total amount of remuneration paid to employees. Any prescribed exclusions that are not leviable are subtracted from the total remuneration.

### By when is the levy payable?

## SKILLS DEVELOPMENT ACT

NO. 97 OF 1998

[ASSENTED TO 20 OCTOBER, 1998]

[DATE OF COMMENCEMENT TO BE PROCLAIMED]

(Unless otherwise indicated)

(English text signed by the President)

### ACT

To provide an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce; to integrate those strategies within the National Qualifications Framework contemplated in the South African Qualifications Authority Act, 1995; to provide for learnerships that lead to recognised occupational qualifications; to provide for the financing of skills development by means of a levy-grant scheme and a National Skills Fund; to provide for and regulate employment services; and to provide for matters connected therewith.

### ARRANGEMENT OF SECTIONS

#### CHAPTER 1

##### DEFINITIONS, PURPOSE AND INTERPRETATION OF ACT

1. Definitions
2. Purposes of Act
3. Interpretation

#### CHAPTER 2

##### NATIONAL SKILLS AUTHORITY

4. Establishment of National Skills Authority
5. Functions of National Skills Authority
6. Composition of National Skills Authority and term and vacation of office
7. Constitution of National Skills Authority
8. Remuneration and administration of National Skills Authority

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##### SECTOR EDUCATION AND TRAINING AUTHORITIES

9. Establishment of SETA
10. Functions of SETA
11. Composition of SETA
12. Chambers of SETA
13. Constitution of SETA
14. Finances of SETA
15. Taking over administration of SETA

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#### CHAPTER 4 LEARNERSHIPS

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#### CHAPTER 5 SKILLS PROGRAMMES

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#### CHAPTER 6 INSTITUTIONS IN DEPARTMENT OF LABOUR

22. Skills Development Planning Unit
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26. Appeal against Director-General's decision

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Schedule 1 Repeal of laws

Schedule 2 Transitional provisions

#### CHAPTER 1

##### DEFINITIONS, PURPOSE AND APPLICATION OF ACT

1. **Definitions.** --In this Act, unless the context otherwise indicates--  
<http://www.polity.org.za/govdocs/legislation/1998/act98-09/> / html

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(f) to ensure the quality of education and training in and for the workplace;

(g) to assist--

- i. work-seekers to find work;
- ii. retrenched workers to re-enter the labour market;
- iii. employers to find qualified employees; and

(h) to provide and regulate employment services.

(2) Those purposes are to be achieved by--

(a) establishing an institutional and financial framework comprising--

- i. the National Skills Authority;
- ii. the National Skills Fund;
- iii. a skills development levy-grant scheme as contemplated in the Skills Development Levies Act;
- iv. SETAs;
- v. labour centres; and
- vi. the Skills Development Planning Unit;

(b) encouraging partnerships between the public and private sectors of the economy to provide education and training in and for the workplace; and

(c) co-operating with the South African Qualifications Authority.

(Date of commencement of s. 2: 2 February, 1999.)

**3. Interpretation** --Any person applying this Act must interpret its provisions to give effect to--

(a) its purposes; and

(b) the objects of the South African Qualifications Authority Act

(Date of commencement of s. 3: 2 February, 1999.)

## CHAPTER 2 NATIONAL SKILLS AUTHORITY

**4. Establishment of National Skills Authority** --The National Skills Authority is hereby established.

(Date of commencement: 2 February, 1999.)

**5. Functions of National Skills Authority** --(1) The functions of the National Skills Authority are--

(a) to advise the Minister on--

- i. a national skills development policy;

- ii. a national skills development strategy;
- iii. guidelines on the implementation of the national skills development strategy;
- iv. the allocation of subsidies from the National Skills Fund; and
- v. any regulations to be made;

(b) to liaise with SETAs on--

- i. the national skills development policy; and
- ii. (the national skills development strategy;

(c) to report to the Minister in the prescribed manner on the progress made in the implementation of the national skills development strategy;

(d) to conduct investigations on any matter arising out of the application of this Act; and

(e) to exercise any other powers and perform any other duties conferred or imposed on the Authority by this Act.

(2) For the purposes of investigations referred to in subsection (1) (d), the Authority has the prescribed powers of entry and to question and inspect.

(3) The Authority must perform its functions in accordance with this Act and its constitution.

(Date of commencement of s. 5: 2 February, 1999.)

**6. Composition of National Skills Authority and term and vacation of office** --(1) The National Skills Authority consists of--

- a. a voting chairperson appointed by the Minister;
- b. 24 voting and three non-voting members appointed by the Minister; and
- c. its non-voting executive officer appointed in terms of section 8 (2) (a).

(2) The members referred to in subsection (1) (b) are--

- a. five voting members nominated by NEDLAC and appointed by the Minister to represent organised labour;
- b. five voting members nominated by NEDLAC and appointed by the Minister to represent organised business;
- c. five voting members nominated by NEDLAC and appointed by the Minister to represent organisations of community and development interests, which must include--
  - i. a woman who represents the interests of women;
  - ii. a person who represents the interests of the youth; and
  - iii. a disabled person who represents the interests of people with disabilities;
- d. five voting members appointed by the Minister to represent the interests of the State;
- e. four voting members appointed by the Minister to represent the interests of education and training providers;
- f. two non-voting members, who have expertise in the provision of employment services, appointed by the Minister; and
- g. a non-voting member nominated by the South African Qualifications Authority and appointed by the Minister to represent that Authority.

(3) The Minister must designate four members as deputy chairpersons, one deputy chairperson



(3) On the establishment of a SETA, the Minister may provide assistance to the SETA to enable it to perform its functions.

#### 10. Functions of SETA --(1) A SETA must--

- a. develop a sector skills plan within the framework of the national skills development strategy;
- b. implement its sector skills plan by--
  - i. establishing learnerships;
  - ii. approving workplace skills plans;
  - iii. allocating grants in the prescribed manner to employers, education and training providers and workers; and
  - iv. monitoring education and training in the sector;
- c. promote learnerships by--
  - i. identifying workplaces for practical work experience;
  - ii. supporting the development of learning materials;
  - iii. improving the facilitation of learning; and
  - iv. assisting in the conclusion of learnership agreements;
- d. register learnership agreements;
- e. within a week from its establishment, apply to the South African Qualifications Authority for accreditation as a body contemplated in section 5 (1) (a) (ii) (bb) and must, within 18 months from the date of that application, be so accredited;
- f. collect and disburse the skills development levies in its sector;
- g. liaise with the National Skills Authority on--
  - i. the national skills development policy;
  - ii. the national skills development strategy; and
  - iii. its sector skills plan;
- h. report to the Director-General on--
  - i. its income and expenditure; and
  - ii. the implementation of its sector skills plan;
- i. liaise with the employment services of the Department and any education body established under any law regulating education in the Republic to improve information--
  - i. about employment opportunities; and
  - ii. between education and training providers and the labour market;
- j. appoint staff necessary for the performance of its functions; and
- k. perform any other duties imposed by this Act or consistent with the purposes of this Act.

#### (2) A SETA has--

- a. all such powers as are necessary to enable it to perform its duties referred to in subsection (1); and
- b. the other powers conferred on the SETA by this Act.

(3) A SETA must perform its functions in accordance with this Act and its constitution.

#### 11. Composition of SETA.--A SETA may consist only of members representing--

- a. organised labour;
- b. organised employers, including small business;
- c. relevant government departments; and
- d. if the Minister, after consultation with the members referred to in paragraph (a), (b) and (c), considers it appropriate for the sector--
  - i. any interested professional body;

ii. any bargaining council with jurisdiction in the sector.

#### 12. Chambers of SETA --(1) A SETA may, with the Minister's approval, establish in its sector chambers.

(2) A chamber so established must consist of an equal number of members representing employees and employers and may include such additional members as the SETA determines.

(3) That chamber must perform those functions of the SETA as delegated to it in terms of the constitution of the SETA.

(4) A chamber of a SETA is entitled to such percentage of the skills development levies collected in its jurisdiction as the Minister after consultation with the SETA determines.

#### 13. Constitution of SETA --(1) For the purpose of the establishment of a SETA, the Minister must approve the constitution of the SETA.

(2) The Minister may, after consultation with the SETA, amend its constitution in the prescribed manner.

(3) Subject to this Act, the constitution of a SETA--

##### a. must specify--

- i. the trade unions, employer organisations and relevant government departments in the sector;
- ii. the circumstances and manner in which a member of SETA may be replaced;
- iii. the number of members to be appointed to the SETA, provided that the SETA must consist of an equal number of members representing employees and employers;
- iv. the procedure for the replacement of a member of the SETA by the organisation that nominated that member;
- v. the circumstances and manner in which a member may be replaced by the SETA;
- vi. the election of office-bearers by the members of the SETA and of persons to act during their absence or incapacity, their term of office and functions and the circumstances and manner in which they may be replaced;
- vii. the establishment and functioning of committees, including an executive committee;
- viii. the rules for convening and conducting of meetings of the SETA and its chambers and committees, including the quorum required for and the minutes to be kept of those meetings;
- ix. the voting rights of the different members and the manner in which decisions are to be taken by the SETA and its chambers and committees;
- x. a code of conduct for members of the SETA and its chambers;
- xi. the appointment of an executive officer, and such other employees necessary for the effective performance of the functions of the SETA, by its members, including the determination of their terms and conditions of employment; and
- xii. the determination through arbitration of any dispute concerning the interpretation or application of the constitution, and

##### b. may provide for--

- i. the delegation of powers and duties of the SETA to its members, chambers, committees and employees, provided that the SETA may impose conditions for the delegation, may not be divested of any power or duty by virtue of the delegation and may vary or set aside any decision made under any delegation; and
- ii. any other matter necessary for the performance of the functions of the SETA.

prescribed manner.

(4) A learnership agreement may not be terminated before the expiry of the period of duration specified in the agreement unless--

- a. the learner meets the requirements for the successful completion of the learnership;
- b. the SETA which registered the agreement approves of such termination; or
- c. the learner is fairly dismissed for a reason related to the learner's conduct or capacity as an employee

(5) The employer or training provider that is party to a learnership agreement may be substituted with--

- a. the consent of the learner; and
- b. the approval of the SETA which registered the agreement.

(6) A SETA must, in the prescribed manner, provide the Director-General with a record of learnership agreements registered by the SETA.

**18. Contract of employment with learner** --(1) If a learner was in the employment of the employer party to the learnership agreement concerned when the agreement was concluded, the learner's contract of employment is not affected by the agreement.

(2) If the learner was not in the employment of the employer party to the learnership agreement concerned when the agreement was concluded, the employer and learner must enter into a contract of employment.

(3) The contract of employment with a learner contemplated in subsection (2) is subject to any terms and conditions that may be determined by the Minister on the recommendation of the Employment Conditions Commission established by section 59 (1) of the Basic Conditions of Employment Act

(4) Chapters Eight and NineI of the Basic Conditions of Employment Act apply, with the changes required by the context, to a determination made in terms of subsection (3) except that--

- a. for the purposes of section 54 (3) of that Act, the Employment Conditions Commission must also consider the likely impact that any proposed condition of employment may have on the employment of learners and the achievement of the purposes of this Act; and
- b. section 55 (7) of that Act does not apply

(5) The contract of employment of a learner may not be terminated before the expiry of the period of duration specified in the learnership agreement unless the learnership agreement is terminated in terms of section 17 (4).

(6) The contract of employment of a learner terminates at the expiry of the period of duration specified in the learnership agreement unless the agreement was concluded with a person who was already in the employment of the employer party to the agreement when the agreement was concluded

**19. Disputes about learnerships** --(1) For the purposes of this section a "dispute" means a dispute about--

- a. the interpretation or application of any provision of--  
<http://www.polity.org.za/govdocs/legislation/1998/act98-09/html>

- i. a learnership agreement;
- ii. (a contract of employment of a learner, or
- iii. a determination made in terms of section 18 (3);
- b. this Chapter, or
- c. the termination of--
  - i. a learnership agreement, or
  - ii. a contract of employment of a learner.

(2) Any party to a dispute may in writing refer the dispute to the Commission for Conciliation, Mediation and Arbitration established by section 112 of the Labour Relations Act, 1995 (Act No. 66 of 1995).

(3) The party who so refers the dispute must satisfy that Commission that a copy of the referral has been served on all the other parties to the dispute.

(4) The Commission must attempt to resolve the dispute through conciliation.

(5) If the dispute remains unresolved, any party may request that the dispute be resolved through arbitration as soon as possible

(6) The law that applies to the lawfulness<sup>2</sup> and fairness<sup>3</sup> of a dismissal for a reason related to an employee's capacity or conduct applies to a dispute contemplated in subsection (1) (c) (ii).

## CHAPTER 5 SKILLS PROGRAMMES

**20. Skills programmes** --(1) For the purposes of this Chapter, a "skills programme" means a skills programme that--

- a. is occupationally based;
- b. when completed, will constitute a credit towards a qualification registered in terms of the National Qualifications Framework as defined in section 1 of the South African Qualifications Authority Act;
- c. uses training providers referred to in section 17 (1) (c); or
- d. complies with the prescribed requirements.

(2) Any person that has developed a skills programme may apply to--

- a. a SETA with jurisdiction for a grant; or
- b. the Director-General for a subsidy

(3) The SETA or the Director-General may fund the skills programme if--

- a. it complies with--
  - i. subsection (1);
  - ii. any requirements imposed by the SETA or the Director-General; and
  - iii. any prescribed requirements; and
- b. it is in accordance with--
  - i. the sector skills development plan of the SETA; or
  - ii. the national skills development strategy; and
- c. there are funds available.

(4) A SETA or the Director-General may set any terms and conditions for funding in terms of  
<http://www.polity.org.za/govdocs/legislation/1998/act98-09/html>

**26. Appeal against Director-General's decision.**--(1) Any person aggrieved by a decision of the Director-General in terms of section 24 (3) (b) or 25 (3) may, within 30 days of the written notice of that decision, in writing, request the Director-General to give that person written reasons for the decision

(2) The Director-General must give that person written reasons for the decision within 30 days of receiving that request

(3) Any person aggrieved by a decision of the Director-General in terms of section 24 (3) (b) or 25 (3) may appeal to the Labour Court against that decision within 60 days of--

- a. the date of the Director-General's decision, or
- b. if written reasons for the decision are requested, the date of those reasons

(4) The Labour Court may, on good cause shown, extend the period within which a person may note that appeal

## CHAPTER 7 FINANCING SKILLS DEVELOPMENT

**27. National Skills Fund** --(1) The National Skills Fund is hereby established

(2) The Fund must be credited with--

- a. 20 per cent of the skills development levies as contemplated in the Skills Development Levies Act;

(Date of commencement of paragraph (a) to be proclaimed )

- b. the skills development levies collected and transferred to the Fund, in terms of the Skills Development Levies Act, in respect of those sectors in which there are no SETAs;

(Date of commencement of paragraph (b) to be proclaimed )

- a. money appropriated by Parliament for the Fund;
- b. interest earned on investments contemplated in section 29 (3);
- c. donations to the Fund; and
- d. money received from any other source

(Date of commencement of s. 27: 2 February, 1999.)

**28. Use of money in Fund.**--The money in the Fund may be used only for the projects identified in the national skills development strategy as national priorities or for such other projects related to the achievement of the purposes of this Act as the Director-General determines

(Date of commencement: 2 February, 1999.)

**29. Control and administration of Fund.**--(1) The Director-General is the accounting officer of the Fund in terms of the Exchequer Act, 1975 (Act No. 66 of 1975) and must--

- a. control the Fund;

- b. keep a proper record of all financial transactions, assets and liabilities of the Fund; and
- c. as soon as possible after the end of each financial year, ending on the prescribed date, prepare accounts of the income and expenditure of the Fund for the year and a balance sheet of its assets and liabilities as at the end of that year.

(2) Any money in the Fund not required for immediate use may be invested with the Public Investment Commissioner or with a financial institution approved by the Minister and may be withdrawn when required.

(3) Any unexpended balance in the Fund at the end of the financial year must be carried forward to the next financial year as a credit to the Fund.

(Date of commencement of s. 29: 2 February, 1999.)

**30. Budget for training by public service employers.**--Each public service employer in the national and provincial spheres of government--

- a. must budget for at least one per cent of its payroll for the training and education of their employees with effect from 1 April 2000; and
- b. may contribute funds to a SETA.

## CHAPTER 8 GENERAL

**31. Jurisdiction of Labour Court.**--(1) Subject to the jurisdiction of the Labour Appeal Court and except where this Act provides otherwise, the Labour Court has exclusive jurisdiction in respect of all matters arising from this Act

(2) The Labour Court may review any act or omission of any person in connection with this Act on any grounds permissible in law.

(3) If proceedings concerning any matter contemplated in subsection (1) are instituted in a court that does not have jurisdiction in respect of that matter, that court may at any stage during proceedings refer the matter to the Labour Court

**32. Monitoring, enforcement and legal proceedings.**--Chapter Ten and Schedule Two of the Basic Conditions of Employment Act apply, with changes required by the context, to--

- a. the monitoring and enforcement of this Act; and
- b. any legal proceedings concerning a contravention of this Act.

**33. Offences.**--It is an offence to--

- a. obstruct or attempt to influence improperly a person who is performing a function in terms of this Act;
- b. obtain or attempt to obtain any prescribed document by means of fraud, false pretences or by submitting a false or forged prescribed document;
- c. furnish false information in any prescribed document knowing that information to be false; or
- d. provide employment services for gain without being registered in terms of section 24

**34. Penalties.**--Any person convicted of an offence referred to in section 33 may be sentenced to a fine or imprisonment for a period not exceeding one year.



must perform the functions of the training board until the contract of apprenticeship expires.

(5) Subject to sub-item (4) (b), sections 13 to 29 of the Manpower Training Act remains in force as if that Act had not been repealed until a date determined by the Minister by notice in the Gazette

(6) From the date immediately after the date referred to in sub-item (5)--

- a. any trade designated under section 13 (1) of the Manpower Training Act is regarded to be a qualification contemplated in section 16 (c) of this Act.
- b. the applicable provisions of any contract of apprenticeship registered in terms of section 18 of that Act are deemed to be a learnership agreement registered in terms of section 17 (3) of this Act and a contract of employment referred to in section 18 (3) of this Act; and
- c. any apprentice referred to in section 17 of that Act is regarded to be a learner in relation to such a learnership agreement.

5. **Training centres** --(1) In this item "training centre" means any--

- a. centre registered as a regional training centre registered in terms of section 31 of the Manpower Training Act;
- b. training centre registered as an industry training centre in terms of section 34 of the Manpower Training Act; or
- c. training trust established in terms of any law mentioned in Schedule 1 of the Integration of Labour Laws Act, 1994 (Act No. 49 of 1994).

and in existence immediately before the commencement of this Act

(2) Subject to subitem (3), a training centre continues to exist and perform its functions as if the Manpower Training Act or any law mentioned in Schedule 1 of the Act referred to in subitem (1) (b) had not been repealed.

(3) A training centre must be liquidated in terms of its constitution not later than 31 March 2000 unless it has been registered as an association not for gain in terms of section 21 of the Companies Act, 1973 (Act No. 61 of 1973) before that date.

(4) The Director-General may take steps to liquidate a training centre after 31 July 1999 if that centre has not--

- a. applied for registration as such an association not for gain; or
- b. taken steps to liquidate itself in terms of its constitution.

(5) If a training centre is liquidated, any assets and rights not required to discharge the obligations and liabilities of that centre must be disposed of in accordance with the directions of the Director-General.

(6) Section 32 of the Manpower Training Act remains in force as if the Manpower Training Act had not been repealed, until a date determined by the Minister by notice in the Gazette.

6. **Arrangements for training of trainees** --Any arrangement contemplated in section 30 of the Manpower Training Act and in force immediately before the commencement of this Act remains in force as if the Manpower Training Act had not been repealed, until a date determined by the Minister by notice in the Gazette

7. **Grants-in-aid** --Section 35 of the Manpower Training Act remains in force as if the Manpower Training Act had not been repealed, until a date determined by the Minister by notice in the Gazette

8. **Fund for Training of Unemployed Persons** --(1) Any balance of the Fund for the Training of Unemployed Persons established by section 36A of the Manpower Training Act is hereby transferred to the National Skills Fund.

(2) The balance so transferred may be used only for the training of unemployed persons.

9. **Training schemes** --(1) Subject to subitem (2), any scheme declared binding in terms of section 39 (5) of the Manpower Training Act continues as if that Act had not been repealed.

(2) Any such scheme must be discontinued not later than 31 March 2000 unless the scheme has been--

- a. registered as an association not for gain in terms of section 21 of the Companies Act, 1973 (Act No. 61 of 1973), before that date, provided that from that registration any notice issued in terms of section 39 (5) in respect of that scheme ceases to be in force;
- b. sold with the agreement of the members of the training board with jurisdiction over employers subject to the scheme before that date; or
- c. transferred to a SETA with the agreement of those members of the training board before that date.

(3) If that scheme is discontinued, any assets and rights not required to discharge the obligations and liabilities of that scheme must be disposed of in accordance with the directions of the Director-General.

10. **Training levies** --(1) Subject to subitem (2), section 39 of the Manpower Training Act remains in force as if the Manpower Training Act had not been repealed, until 31 March 2000

(2) A notice imposing a levy in terms of section 39 of the Manpower Training Act and issued, before or after the commencement of this Act--

- a. may be amended by the Minister, by notice in the Gazette, to provide that the levy be paid to a SETA designated in that notice; and
- b. ceases to be in force when withdrawn in terms of the Skills Development Levies Act.

11. **Training advisers** --Sections 45 and 46 of the Manpower Training Act remain in force as if the Manpower Training Act had not been repealed, until a date determined by the Minister by notice in the Gazette.

12. **Registered work-seekers** --Any work-seeker registered in terms of section 4 of the Guidance and Placement Act immediately before the commencement of this Act is regarded to be a registered work-seeker in terms of section 23 (2) (b)

13. **Private employment offices** --Any private employment office registered in terms of section 15 of the Guidance and Placement Act immediately before the commencement of this Act is regarded to be an employment service registered for gain in terms of section 24 of this Act

14. **Local government sector** --(1) The Local Government Training Fund (in this item referred to as "the Fund"), established by section 7 of the Local Government Training Act continues to

REPUBLIC OF SOUTH AFRICA

## SKILLS DEVELOPMENT LEVIES ACT

REPUBLIEK VAN SUID-AFRIKA

## UMTHETHOSIVIVINYWA WEZIBIZONTELA WOKUTHUTHUKISA AMAKHONO

No , 1999

### GENERAL EXPLANATORY NOTE:

- [ Words in bold type in square brackets indicate omissions from existing enactments.
- Words underlined with a solid line indicate insertions in existing enactments.

## ACT

To provide for the imposition of a skills development levy; and for matters connected therewith.

**B**E IT ENACTED by the Parliament of the Republic of South Africa, as follows:—

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#### CHAPTER 2

#### RECOVERY OF LEVY BY SETA 20

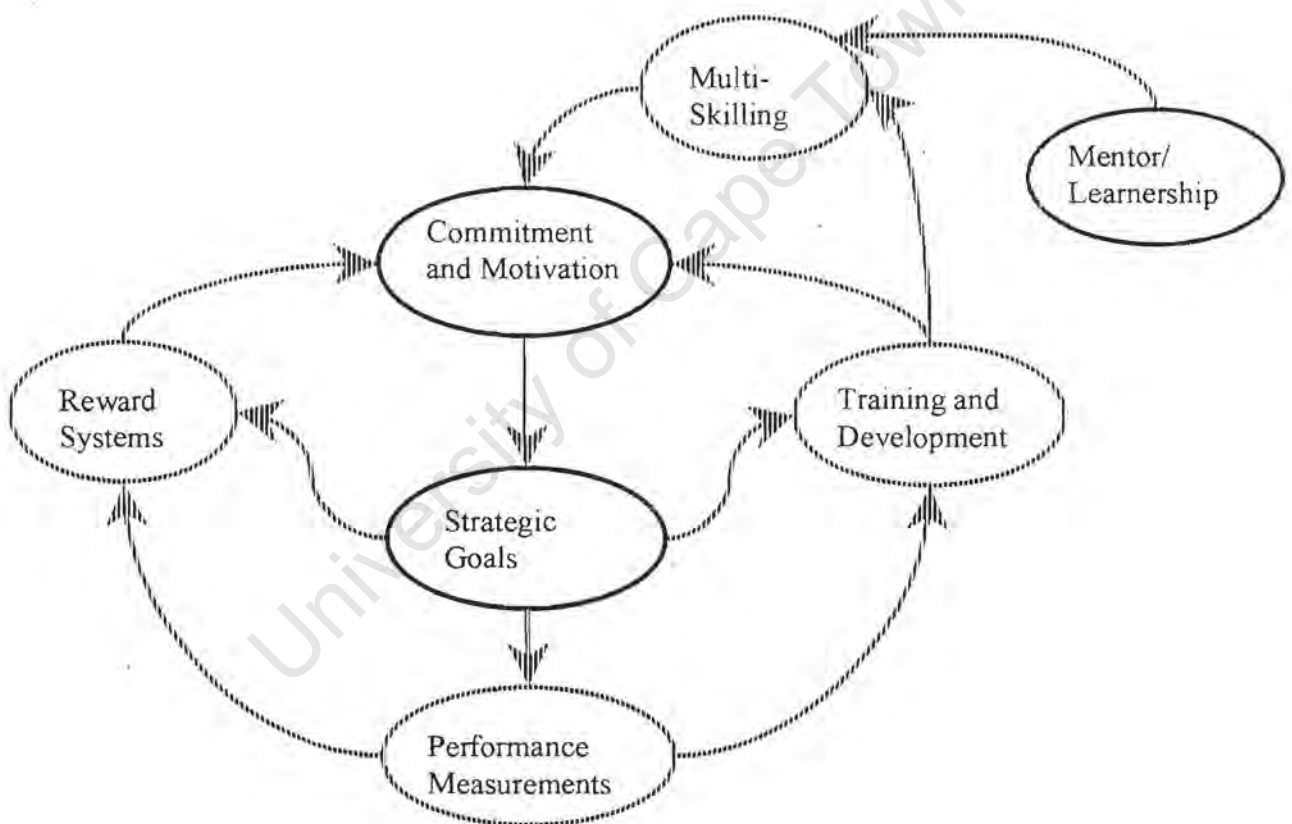
14. Recovery of levy
15. Appointment of inspectors
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## Appendix I – Competence CLD Generation (figure 30)

The following model is the outcome of Management team sessions facilitated by the Author. The sequence followed in the sessions was:

- 1). Brainstorming of the Issue.
- 2). Affinity Digraph (results given on the following pages).
- 3). Interrelation Digraph

The interrelation digraph was used to generate the model as shown below.



## **MULTI SKILLING**

Jobs should be less constrained across the organisation to allow for multifunctional mentoring.

Establish the basics required for efficient productivity and create job descriptions suited to a flexible factory.

## **MENTORSHIP**

Mentorship for sharing knowledge

Participants can't transfer skills

## **PERFORMANCE MEASUREMENT OF SKILLS**

Develop a recognition system for competencies gained / used

The ability to perform consistently to a high standard.

Performance appraisals can be used to measure the level of competence of the employee. It is an ongoing process.

Establish a fair measurement system and benchmark against performance.

Competency shall be evaluated against job requirements and business goals.

We need a standard to benchmark against efficiency.

Competency is being a specialist and using goals + benchmarks to effect the work.

## **STRATEGIC DIRECTION + GOALS**

**Align competencies to / with strategic direction.**

**Skills development must be aligned with the business needs.**

**Competencies / strategies and business objectives need to be aligned to strategy.**

**Awareness of the company's strategic plan must be incorporated into the chosen career paths of individuals.**

**Core competencies must be aligned with business strategy.**

**Ensure that traditional competencies are not evaded over time by other Plascon policies. In order to do this a long term strategic plan needs to be in place.**

## **COMMITMENT / MOTIVATION**

**Getting people to accept responsibility for the positions they are in.**

**This must be achieved by people understanding these job requirements.**

**To perform without supervision to the desired outcome.**

**To show a willingness to progress to a higher level.**

**Establish goals with individuals in line with strategic requirements and encourage suitable training to achieve.**

**Understanding the job requirements and having the skills will lead to willingness and ability to achieve the business goals.**

## **TRAINING SKILLS**

**Competency is achieved at times by learning from previous mistakes and not repeating it again.**

**Competency development is a core competence.**

**Exposure to changing situations used to broaden skills base → Multi-skilling.**

**Multi competence.**

**Competence achieved through training. (All agree).**

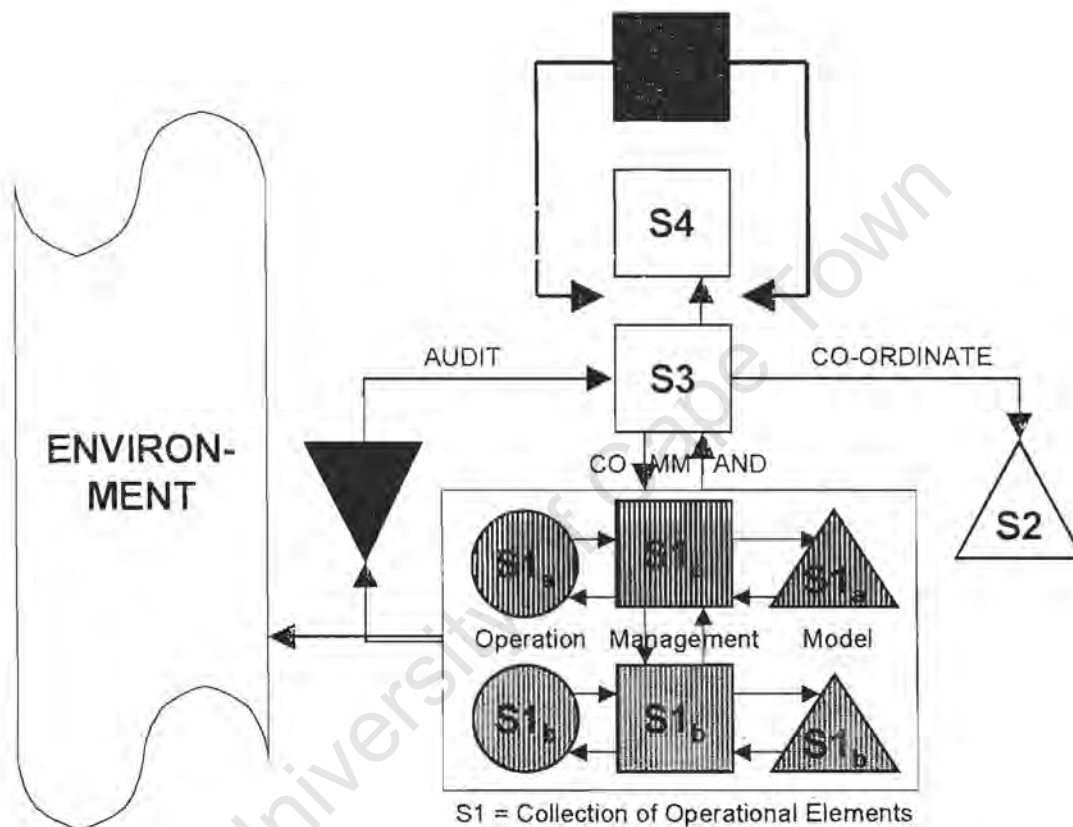
**Competency is gained by proper training and understanding how the individual affects the rest.**

**Training of the right people will lead to improved competence.**

**Setting standards and training to rectify weaknesses.**

**Competency is when you have the skills related to a specific job requirement and can perform the duty at an international standard.**

## APPENDIX J – The Viable Systems Model



### System One (Implementation)

1. Collection of manufacturing or service-provision cells.
2. Produces goods and/or services with which the organisation is ultimately identified.

#### *Regularly Occurring Acts Satisfying Human Needs:*

- Allows individuals to feel part of a smaller, tangible 'family'
- Lets individuals exhibit and practice their skills and talents
- Clarifies the purpose for which people are actually employed

#### *Regularly Occurring Acts Satisfying Social Needs:*



- Realises potential value, identified at the normative level, by creating goods and services
- Stimulates the economy by consuming raw materials and original equipment

*Regularly Occurring Acts which Maintain System Parts:*

- Executes Planned Maintenance of capital and working equipment
- Introduces shop-floor innovations in production or service delivery to reduce cost and improve productivity
- Finds human resources of the correct profile with which to feed the production process
- Purchases raw materials and finished goods for input to internal production processes

*Regularly Occurring Acts which Maintain System Whole:*

- Stimulates the macro-economy by generating wealth
- Sells finished goods and services to a market in order to generate income for subsequent investment and growth

**System Two (Co-ordination)**

1. System of rules and behaviour for co-ordinating parts of System One
2. Dampens uncontrolled oscillations
3. Communication and information channel
4. Supports decentralised decision making

*Satisfying Human Needs:*

- Allows individuals to communicate formally and informally
- Provides guidelines with which the individual can interpret his immediate and corporate environment

*Satisfying Social Needs:*

- Provides policies with which to solve conflict between the sub-systems of System One
- Communicates the norms and standards expected of groups and individuals (rules and regulations)
- Provides guidelines for social interaction

*Maintain System Parts:*

- Regular briefings assist in unifying groups or units
- Budgeting provides individual cost/profit centres with goals and constraints

*Maintain System Whole:*

- Budgets are financial instruments for expressing the planned resource allocation within the company
- Directives from the CEO provide clarity on organisational issues
- Notices on notice boards complement the general flow of oral information

### **System Three (Control)**

1. Maintain homeostasis of organisation through the Command Channel
2. Responsible for ensuring System One sub-systems produce goods complying with Policy (System Five).
3. It is the channel for orders within the organisation
4. Enhances performance of the whole by increasing synergy between parts
5. Monitoring critical variables through System Two and System Three\* channels

#### *Satisfying Human Needs:*

- Provides direct guidance to the management of sub-units, on an infrequent basis

#### *Satisfying Social Needs*

- Provides a channel for the negotiating of resources between sub-units

#### *Maintain System Parts:*

- Allows operational elements to be directed, on an exception basis

#### *Maintain System Whole:*

- Allows the meta-system to control System One directly, as required

### **System Three \* (Audit)**

1. Does not exist by itself; utilised by System One
2. Infrequent detailed check on the normal reporting of System One
3. Not an extra channel for delivering policy instructions

#### *Satisfying Human Needs:*

- Sporadic audits appraise management of the real state of affairs

#### *Satisfying Social Needs:*

- Management-by-walking-about provides 'soft' information, not normally obtainable by conventional reporting means

#### *Maintain System Parts:*

- External audits from adjacent levels of management allow the sub-system's state of health to be assessed in a less biased manner

#### *Maintain System Whole:*

- Monitoring mechanisms (such as accountability reports) allow critical review of System One's performance against the organisation's critical variables

### **System Four (Intelligence)**

1. Creates an explicit model of the organisation
2. Models the organisational environment
3. Deals with inventing the future

#### *Satisfying Human Needs:*

- Scenarios and forecasting address a basic human need for dealing with the future (unknown)

#### *Satisfying Social Needs*

- Managers' models of an organisation are made coherent using an enterprise-wide understanding of the business - an organisational model

#### *Maintain System Parts:*

- Sub-systems are better able to understand who it is they need to interact with, if they espouse an organisation-wide model
- Periodic business planning exercises assist in preparing units for their individual futures

#### *Maintain System Whole:*

- Future-focused recommendations and plans allow the organisation to deal more proactively with change in its environment

### **System Five (Policy)**

1. Balances the relationship between Intelligence and Control
2. Does not generate know-how or alternative courses of action
3. Clarifies direction through policy
4. Sets values
5. Establishes organisational purpose and provides closure
6. Designs conditions for effectiveness

#### *Satisfying Human Needs:*

- The individual's sense of purpose and identity can be aligned with a well-defined company identity

#### *Satisfying Social Needs:*

- A clear, enterprise-wide identity and values can be a strong rallying post

#### *Maintain System Parts:*

- Cohesion of groups and units is achievable if individuals observe the norms expected from them
- Sub-cultures may be aligned by a strong organisational identity

### *Maintain System Whole:*

- Decisions which cannot be resolved at lower levels of the organisation reach closure using a meta-language (Godel's Incompleteness Theorem)
- Company mission, vision, and business statements are determined

### **Cybernetic Laws**

**Law 1:** Self Organising Systems Law: Complex systems organise themselves. The characteristic structural and behavioural patterns in a complex system are primarily the result of the interactions among the system parts.

**Law 1A:** Complex systems have basins of stability separated by thresholds of instability.

**Law 2:** Feedback: The output of a complex system is dominated by the feedback and, within wide limits, the input is irrelevant.

**Law 2A:** All outputs that are important to the system will have associated feedback loops.

**Law 3:** The law of Requisite variety: Given a system and some regulator of that system, the amount of regulation attainable is absolutely limited by the variety of the regulator.

**Law 3A:** Most of the regulation of very complex systems is achieved through the interaction of the parts (i.e. one part acts to regulate some other part).

See also glossary

## **Appendix K: The Viable Systems Diagnoses (VSD's)**

### **INDEX**

- 1). VSD For Training and Development
- 2). VSD for Activity Based costing
- 3). VSD for the Cape Production Unit

#### **1). VSD For Training and Development (see figure 17)**

#### **2). VSD for Activity Based costing (PTO)**

#### **3). VSD for the Cape Production Unit (PTO)**

The VSM shown above has been developed from interviews with various staff members and also a second interview with the production manager. The VSM shows the five systems that Beer [22] asserts are necessary for a viable system. These systems are implementation, co-ordination, control, intelligence and policy. A further explanation of VSM is given in the previous appendix.

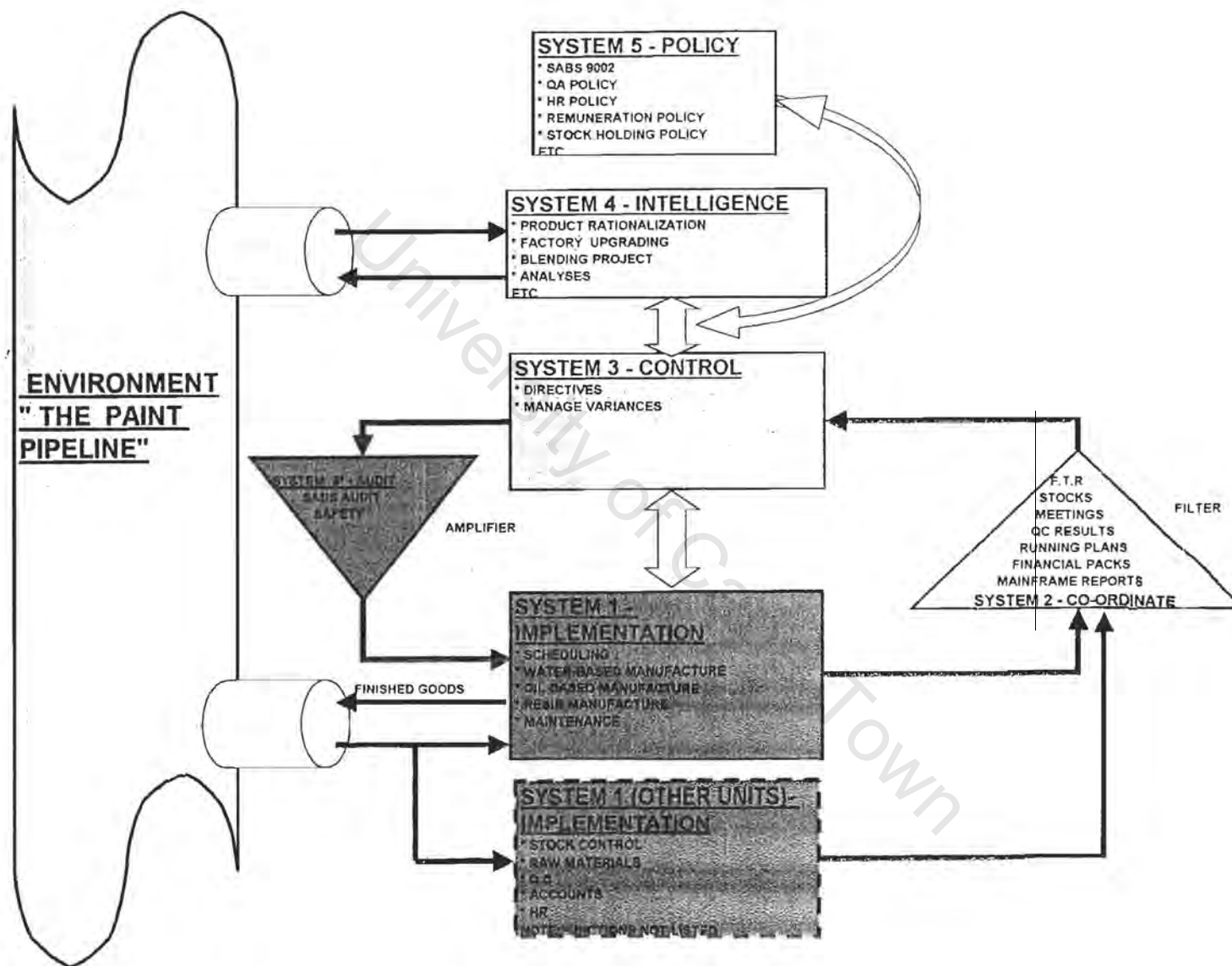
The question asked at this stage is:

#### **Does the VSM support the Business Idea that is currently in place?**

System 1 is the collection of manufacturing cells in the factory. System 1 is similar to the transformation diagram presented at the start of this section. The support services are indicated as a separate system 1 block. The other systems constitute the meta-system or control system of the transformation of raw materials to finished goods. The levels of recursion are clearly in-place on the VSM.

The large pool of knowledge, mainly at the implementation level (system 1), supports the business idea. Current expertise in the implementation function i.e. system 1, enables versatility. This pool of knowledge is one of the distinctive competencies of the current business idea of the production unit.

There are many system 2 functions in place within the production unit and this further enhances the business idea in terms of teamwork. Communication channels are well established and utilized.



**FIGURE : PLASCON CAPE PRODUCTION UNIT - VSM DIAGNOSIS**





System 4 includes the product rationalisation function. The production unit itself undertakes Very little product rationalisation. The production unit, to a certain extent, will 'grab any production it can'. Only in exceptional cases are production given away to other centres.

The VSM is well balanced for the production unit (at recursion level 1). The main area of concern is system 3 – control. Many control functions that were stated as control functions in the interviews are in fact co-ordination functions. The control functions in place are listed on the VSM as directives but this was not explored in any depth.

Aspects of system 4 that are supporting the business idea include the blending project. This project is well supported by the current flexibility within production and laboratories. The factory upgrading project is very much dependant on the business idea. Product rationalisation at other centres is not working properly. This has been discussed with the aid of CLD's at the start of this chapter. The group rationalisation plans have been followed at Cape Town, but often the other centres are unable to supply according to the plans and the product continues to be made at Cape Town.

Any future upgrading should be in line with the distinctive competencies in order to leverage current strengths.

System 5 (Policy) is well established in terms of the various policies in place. These policies are set at corporate level and are the same for all centres. There is no written policy on product rationalisation. The identity created at recursion level 0 in the system is not shared.

The VSM does not support the business idea at the system 4 level. Product rationalisation is imposed on the system and not, in general, determined by it. More specifically, system 4 is ineffectively positioned to maintain the parts of the production unit due to external policies. These include the group rationalisation plans and group stock holding policy. Poor implementation of these policies at recursion level 0 in the overall system (i.e. group level) is the main factor that allows the production unit to continue functioning.

We are now in a position to discuss the underlying implications of the model for systemic organisation present earlier.

## DISCUSSION

### The Learning Organisation And The Business Idea

The current business idea – Flexible manufacturing site – is well supported at the various recursion levels within the organisation. Each value-creating subsystem within the organisation does have its own business Idea that is in line with the broader aims of the current organisational Business Idea. The common purpose of the production unit is well understood by the members of the system and this is one of the main factors promoting current success and viability. The level of turbulence that is presented to the system by the

environment is matched by the level of adversity within the unit and this is a requirement for a learning organisation (as set out in the start of this chapter).

Although the business idea is well defined, it is essentially tacit and this factor does not promote viability. The model requires discussion of the business idea, as defined in the preceding chapters, leading to an explicit model. Hence future viability requires a forum for the articulation of the current business idea. There is also a lack of evidence to indicate that the knowledge pool contributing to the current distinctive competencies of the production unit is being transferred to other staff members. Thus, the main inputs to promote a learning organisation are in place but development to this end is not being undertaken to the full potential.

### **The Functional Framework For Systemic Organisation**

The elements of the functional model have been evaluated using the VSM approach. These results are presented in the preceding chapter and also in appendix F. Viability is supported by versatile and well-entrenched system1 (implementation), system 2 (co-ordination) functions and system3\* (audit) functions.

The business idea is well supported by the VSM in the area of competitive advantages.

The VSM analysis indicates that policy and intelligence functions are not fully supportive of the system as a whole or the business idea currently in place. This occurs at recursion levels 1 (production unit) and recursion level 0 (Plascon group).

System 4 (intelligence, looking outward) requires the development of business plans for the unit that are future focussed. At present this is limited to the yearly budgeting exercises. This is a vital input into the development of a business idea that is lacking. Future focussed plans exist in the form of discussion around the proposed upgrade of the factory. Product rationalisation is mainly done in line with group requirements and represents a restraining factor on the production unit. There are moves afoot to implement a minimum batch size at the factory and this represents a strengthening of the system4 function. The business idea contains shared values as a distinctive competency. There are moves afoot to strengthen this in the form of discussion groups ("Life after the Indaba" seminar and "Team effectiveness" workshop). Thus a system four function supports the business idea and steps are being taken to enhance this function within the unit.

The system 5 functions (policies) are well entrenched and, in some instances, unintentionally promote the current viability of the production unit i.e. the stock holding policy. Previous attempts to close the production unit indicate that promotion of viability is not exactly at the top of the agenda for the Plascon Group. However, poor stock holding and product rationalisation implementation are problems that can and will be solved. Hence the question that must be asked is: What policies are in place to promote the future viability of the unit? The development of policies at the Cape Town site, especially with regard to the current constraints in place need to be understood in order to address the above question. Due to lack of time, this issue has not been further explored. It is recommended that these constraints be evaluated in terms of the systemic model in section 3.1, which addresses the issue of paradigms. The system 5 function has recently been strengthened by the start of a new

development project at the production unit i.e. the blending project. This type of work takes full advantage of the current business idea at the system 5 level i.e. flexible manufacturing site.

The objective of become a learning organisation has been stated as an objective by the H.R department and this supports the business idea currently in place. However, policies to this effect were uncovered in this research report.

## **Appendix M – Continuous Improvement**

### **Read in conjunction with figure 14.**

#### **25 L Filling Machine Improvement Project- Analysis using the CI Model (Figure 14)**

Effectiveness of communications between Projects and Factory Staff decreased in the detail design phase when drawings were presented and the staff were told where the machine

- Level of teamwork in design/conceptual phase (i.e. specific location of machine etc, etc) decreasing, this lead to
- Staff lack of confidence in the new system increasing during the installation phase, and also
- Staff complained about the training given during the commissioning phase,
- Staff lack of confidence increased which leads to an decrease ("O") in effectiveness of implementation, and also
- A decrease in the effectiveness of training also contributed to a decrease in team effectiveness during the implementation phase.
- During the hand over phase feedback had been reduced to a small amount as shown on graph 1. This was a direct result of lack of teamwork in the implementation phase.
- The cycle continued in the handover phase (and became a *rather vicious* cycle at times !).
- The effectiveness of communications was increased when a new operator was sent to the machine and the projects dept. handed over to the new man.

## Appendix N Minutes of Meetings and Presentations

### SDF Meeting – 4<sup>th</sup> August 2000 Notes.

Unit standards must be developed in order to remove the subjectivity of skills assessment. The standards have two sources:

1. Standards Generating Bodies (from the Seta's) and
2. Plascon specific standards. These will be NQF standards customised for the company.

Current performance management system has a major shortcoming in that staffs are not measured against a standard and this is very subjective. Hence real gaps are difficult to identify.

The companies training budget is about R 64000 p.m which is about 4% of the salary bill. Phillip mentioned that this was high as the average in the industry sector is about 2%.

The Skills development act is still silent on the roll of the SDF (skills Development Forum).

Will Head Office define the role? (Steve to Phillip)  
Only I.t.o broad guidelines

The possibility of the SDF being a permanent feature in the company as opposed to a feature that is only required to deal with the current legislation was discussed and it was agreed that it would be more effective if this was approached with a longer term perspective in mind. The SDF would not only focus on skills but also training and development within the company as a whole.

#### Presentation by Mzi Gaga – Group Training Manager – 10 July 2000

This presentation was made to the Employment Equity forum and the main points are noted below.

Skills must be identified first before embarking on training.

Skills plans must be linked to business strategy.

Skills plans must address employment equity but should not be developed with the sole focus on the Skills Development Levy but rather towards the competitive edge of the business. The Skills levy grant would only be regarded as a cherry oibn top by senior management.

Job profiles must be developed as the current system is one of job descriptions only and this is inadequate. An assessment policy (for skills assessment) will be available by the end of August for discussion. The skills assessors would be trained by the end of November.

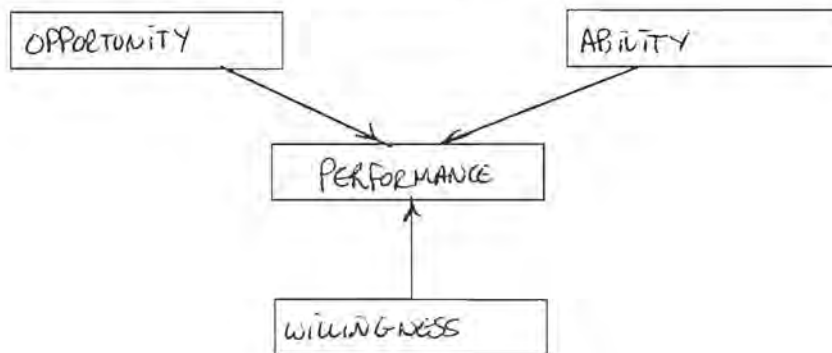
#### Presentation by Mzi Gaga to Epping Ops Managers – 9 August 2000-12-03

Mzi made the following points during the presentation

1. Training responsibility needs to be put where it belongs – with the line managers. We must move away from training for training sake and ensure that



it is aligned with business strategy before embarking on training. If there is a training deficiency or there is another problem, this must be firmly established. We cannot assume that training will solve all problems. The slide about sales consultants were presented. The performance driver paradigm was also presented and this is shown below.



Mzi pointed out that, from the above diagram, he believes that training can only solve the ability side of the performance equation. Willingness and opportunity need to be addressed primarily by the unit managers.

2. Mzi posed the question: Do we have business goals? . He mentioned that these goals may differ from today to tomorrow but the broader strategic goals are present. His observation (and the audience agreed) was that area of concern is that the strategic goals were more generic and hence no measurement systems and targets were in place.
3. The training department should be seen as a resource in terms of facilitating and not as the people who determine what training should take place.
4. A large area of concern at the moment was the fact that current job descriptions do not have performance measures built in. A major goal of the training department in the near future would be the development of job profiles which contain measurements based on unit standards (see glossary). The current job descriptions would serve as the basis for the job profiles. The job profiles would then be measured against the unit standards.

One question was posed at the end of the presentation: If the unit standards that are being developed by the Seta's (Chieta for the Paint industry) then these bodies are telling us how to perform? Mzi answered that these unit standards that are being developed by the Seta's contain generic measures and that we will have to write our own measures into the unit standards.

Mzi presented the form shown on the overleaf. He requested that this form serve as the basis for determining staff training requirements.

Authors opinion of the above: The presenter was very open-minded and positive in his approach to the question of training and development. No broad assumptions were made and this is evidenced by the posing of such questions as do we have business goals? and the like. These questions were approached in an interactive manner with the audience enabling the audience to define the problem. His approach to training was very much in line with the of the MD and this is expressed in the policy that the company has of "driving HR down the line". This was expressed in point 3 above where he mentioned that managers need to take control of training and not expect the training department to know what skills are required. A collaborative approach is what is required.

#### **SDF Meeting – November 2000**

##### **Authors notes:**

**Present: SO, JK, GE, PT and MM**

#### **Assessor and Mentor Training**

PT\_ this was supposed to start at the end of October but due to PC problems this was delayed. Managers have been asked for the names of those whom they would like as assessors and these have been forwarded.

PT- perhaps the members of this committee should also be trained up (nobody objected)

#### **Mentoring**

The mentoring system was brought up and discussed at length. This was in response to the CLD (see figure (XX)) that was developed by the management team. The CLD clearly showed that mentoring was required but nobody knew where to put it at the session. The objective was decided to be the transfer of skills from older or more experience staff members to those who required the skills. Various other aspects of the system were also discussed.

SO- a reporting system with accountability (for the mentors and the trainees) should be included. The system could be as simple as filling out a report once every quarter for the mentor to access and then pass on to the training department. This could also be an oral assessment.

PT- will arrange a presentation on mentorship to the managers to further sell the idea  
GE- We need an area that is specifically devoted to learning and personal skills development e.g. career development. Have a learning centre (incl. PC's) as a shared resource

JK- not sure of the role of the SDF anymore

PT (chairman)- the role is as a subcommittee of the employment equity committee with the objective of looking at skills issues within the framework of the Skills Development Bill.

GE-brought up the thing about the library above because we are at a junction band can't go much further because the Seta has been set-up but there are no unit standards forthcoming and these are crucial to the work of the SDF.

SO-the skills development information and graphs pertaining to employment equity are in place on the server and can be accessed by all. These graphs show the intended direction of the company from the training perspective.

GE- it is important as the SDF to generate a culture of learning

PT- maybe it's was time to review the vision of the committee. After much discussion, the vision and mission was agreed at:

**Mission**: to ensure equitable development of the Epping workforce.

**Vision**: to adhere to the numeric goals as set out by the Employment Equity as applied to the whole company.

The meeting Ended.



## Appendix O: The Training Database Help File.

Please click on one of the topics below for help. Click [here](#) for tips on using this help file.

**Getting Started** : Starting your own database. Quick tip for quick startup.

**Training and Skills Plans** : Using the Training/skills form. Adding courses.

**Grading and Departments** : Adding company information

**Report and Budgets; Costing**: Which report to choose. Sorting. Budgets

**SAMPLE Graphics**: View samples of the graphics output from the program.

**Printing** : How to print. Email reports. Export reports in Page setups

**Skills Development Internet Links** : Additional information.

### **Help on help**

To assist you in using this help file please note the following:

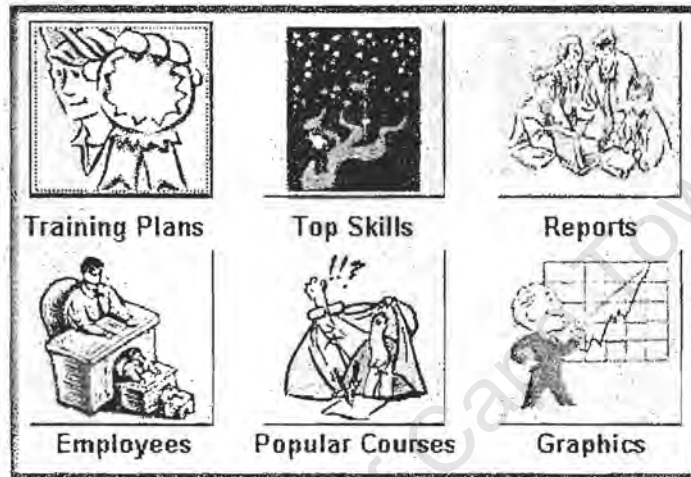
- In this help file, words in bold and blue indicate a link and clicking on these will take you to the section. e.g. clicking at the end of this sentence will take you **back to INDEX**
- When a push button in the Program is referred to it will be shown in red like "This".
- A report is shown in bold red like "**This**".
- A form is shown in black underlined like "This".

### **Getting Started**

The Training and Development Database can be run by double clicking the Training Program icon in the e-mail window. The setup process will then begin and you will be guided through each step. Please check that you have the correct computer system requirements that the setup program asks for. Once the program starts, "Start..." buttons on the menus will provide quick tips on getting started.

change your world

## Training and Development



**Author: Steve Osborne**

**Services**

**Starting you own database:-**

### **Employee Details**

There are numerous ways to start entering information into the database. Listed below is one of many methods. From the Main Menu click "Employee Details" button. The main menu is the one with your company name as the heading. This opens a blank form with the heading "Employee Details".

**Employee Details**

Select Lookup Name:  ▼

---

**MainDetails** | **Personal Details** | **Contact** | **Membership**

<b>Surname</b>	FOCHESSATI	
<b>Initials/Name</b>	CJ	
<b>Company Number</b>	1238	
<b>Job Title</b>	SALES CONSULTANT	
<b>Department Code</b>	152-23 <span>▼</span>	
<b>Grade</b>	CU <span>▼</span>	

**Photo**

---

1. The box at the top, "Select Lookup Name", is used to lookup employee details. This demo database does have some sample names in it. Clicking the down arrow in this box will show employee names in alphabetical order
2. In the main area of this form, employee details will be shown and can be edited.
3. If you want to enter a new name click the "New Employee" Button at the bottom left of the form. This will clear the form for a new entry. The data in the lookup field will not affect any new entries.
4. If there are many employee details to be entered then the "Ddatasheet" button at the bottom right of the form can be used.
5. The "Ddatasheet" Button will show the employees spreadsheet. Employee details can also be entered or changed here.
6. If you wish to delete any records from the *spreadsheet*, this can be done in the same manner as in MS Excel i.e. click the record selector button on the left hand side of the record that you wish to delete. This will change the entire row to a black highlight. If you are happy that this is the record you want to delete, then click the delete button on the keyboard. Multiple record deletion can also be done. NB: on clicking delete, a delete confirm box will appear. Clicking yes will delete the selected record and any attached details. This means that deleting an employee name will also delete the employee training plan and skills plan.
7. Employee grades and departments can be selected from the down arrows on the forms. If you would like to add department or change the grading system click [here](#)

employee name will also delete the employee training plan and skills plan.

7. Employee grades and departments can be selected from the down arrows on the forms. If you would like to add department or change the grading system click [here](#)

If you are finished with this form then close the active window to return to the Main Menu - you are now ready to compile training and skills plans.

see also **Entering Training and Skills Plans ; Printing ; Reports**

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### **Grading**

The "Grading" button at the bottom of the "Employee Details" form will open a form named "Grade Finder". If grades have been inputted on the database, this form allows the user to view the details for employees in a particular grade. Next to the "Grade Finder" label at the top of the form, you'll find a lookup box. Clicking the down arrow on this box will show a list of all employees in the database. Please note that this form is not for data entry. It is used to view employee categories and printout skills/training plans and budgets for the category that the user selects.

The grading system can be changed by clicking the "Change Grading" button at the bottom of this form.

The "Grade Training" button on the "Grade Finder" form is a print preview function. Clicking this will generate a report on the grade that is currently shown on the screen. The report is for the selected grade and shows, in alphabetical order, the training plan and skills plan for each individual. If training costs have been inserted, the report also generates the projected training budget for the selected grade. If you are finished with this form then close the active window to return to the Main Menu. To enter costs, go to the Main Menu and select the "Courses" button or click [here](#) for more information.

### **Departments**

The "Department" button at the bottom of the "Employee Details" form will open a form called "Company Departments". Here department codes, names and HOD's can be entered. Note that HOD's can only be selected if the HOD name has already been entered on the previous form i.e. The "Employee Details" form. These details are used mainly for categorisation on reports and also to assist in mailing of reports. The form can be used in the same manner as a spreadsheet. To delete records from the form see **point 8** under the

## Training and Skills Plans

Skills and training plans can be entered on the same form and the user can switch between these two plans, whilst on the same form. Once satisfied, a report can be previewed directly from the form.

**Training Plan**

Employee:  Initials:  Department:  Grade:

Job Title:

Training Year	Course	Current Cost	Training Level
2000	Customer service	R 850	SALES
2000	SALES CONFERENCE	R 3,500	SALES
2000	Customer service	R 850	SALES
2001	SALES CONFERENCE	R 3,500	SALES
2001	Customer service	R 850	SALES

Items: 13 Total Cost: R 26,950

Record: 1 of 13

To begin the training and skills database, go to the Main Menu. The 4th button on the "Forms" side of the Main Menu (the one with company name at the top) is labelled "Skills/Training". Clicking this will take you to the "Skills and Training" form. The form opens with the "Skills" label at the top left of the form. The form is used to simplify data entry into a spreadsheet, which is sitting in the background, but which the user does not have to touch.

The box at the top right of the form shows the employee details. To select an employee, click the down arrow in the employee box. If the employee name is not in the box, please close this form and click the "Employees" button on the Main Menu.

The button under the main heading of the form is the "see Training Plan" ("/see Skills") button. This is used to switch between the employee Training plan and Skills list.



The button under the main heading of the form is the "see Training Plan" ("see Skills") button. This is used to switch between the employee Training plan and Skills list.

## **Back to INDEX**

### **Skills**

Skills can be selected by clicking the down arrow on the spreadsheet, in the "Skill" column. The skills shown are the skills that current employee has. The actions indicate what is to be done about a skill. For example if a skill rating for communications is low, the action could be to go on a training course. Actions can be selected by clicking the down arrow in the Actions column. The rating column is a rating number for the employee proficiency at the skill (1-10). The weight column is for the relevance of the skill to the employee's current job (1-10).

If skills or actions are not in the list, these lists can be updated by clicking on the required button at the bottom of the form. Both the "Actions" and the "Skills" forms have a spreadsheet button that can be used to speed up data entry, if required.

### **Training Plan**

The training plan operates the same way as the skills plan. All selections can be made using the down arrows. Costs will be filled in automatically if the course costs have been entered on the "Course Details" form. If you want to change course details or add a course, click on the "Courses" button at the bottom of the form. This will open the "Course Details" form. Here, course costs can be inserted for training budget purposes. If you have many course details to put on record then the "Datasheet" button can make this easier.

Please note, on the main "Skills/Training" form, that a year must be entered for the new record or the form will not close. If you are half way through entering a new record and want to exit, first press the "Escape" button on your keyboard then close the window.

Notes on **course costs** : Inflation of costs has been catered for by allowing the user to input an inflation rate on the "**Reports**" menu. This can be done by clicking the "Report Settings" button. The start year for reports can also be set here. If other types of financial calculations are required, click the "W" button on the print preview toolbar. The current report can then be exported to MS Excel for calculations.

For ease of comparison, all costs are shown as current costs for individuals. This means that a course done in two years time will be shown at it's current cost. Inflation calculations are carried out only for the department budget totals. These will be found on the last page of the department reports. If a

course cost is adjusted in the database, this change will affect the related records for all employees i.e. it is a global change.

### **Print Preview Button**

A print preview button is also shown at the bottom centre of this form. This button will show both the skills and the training plans for the selected employee. A budget planner is also provided on the last page of this report and will show the current training cost budget for the department that the employee belongs to.

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### **Printing**

All reports are opened in print preview mode. This allows the user to adjust margins and page layout as required. The way a report will be distributed e.g. e-mail, export to MS Word, printer etc, can also be selected in preview mode.

An office link button "W" is provided on the print toolbar to allow users to send a report to MS Word or Excel. The print toolbar is the list of icons that open at the top of the window when a report is being previewed.

A send button, located next to the office link button mentioned above, allows the user to **email** reports in different formats e.g. Excel, Word, snapshot.

If the first page of a report is blank, page setup must be adjusted. This may happen when using the program for the first time. There is a page setup button on the print preview toolbar. Alternatively, close the report and then click File at the top of the Main Menu. Then click Page Setup on the file menu. 12 mm margins with the left hand set at 20 mm works the best for an A4 page.

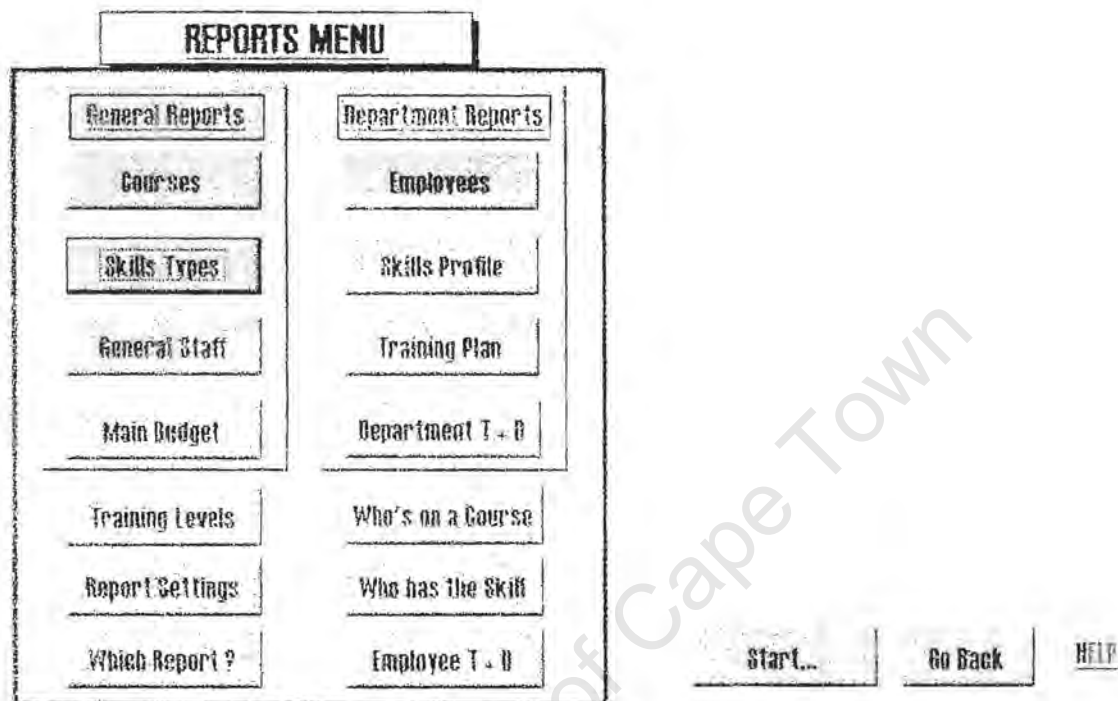
### **Back to INDEX**

### **Reports**

The database includes a budgeting section where employee, department and company training budgets can be compiled. Plans can range from 1 to a 20 years. The budgets are included on the last page of the main reports. If costs have not been entered for courses, a budget cannot be compiled. To enter costs, go to the Main Menu and select the "Courses" button or click here for more information.



have not been entered for courses, a budget cannot be compiled. To enter costs, go to the Main Menu and select the "Courses" button or click here for more information.



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On opening, the "Reports" menu shows:-

The heading - "Reports" - and the following buttons:

1. **"Who has the Skills"** - This report will show all the skills on record and who is listed for that skill. The skill types are in alphabetical order and the names in each section are in the same order.
2. **"Who's on a Course"** - This report lists all training courses on the database. The sorting is the same as for no 1) above.
3. **"Employee T & D"** - Clicking this button will open a sub menu. The submenu has a list of all the names that are on the database (alphabetical sort on surname). Double click on a name to select it. If the selection is correct then click preview otherwise double click on another name to change the selection.

## Department Reports

1. **"Employees"** - clicking this will bring up a list of departments on record. Double click a department and then click preview.

3. **"Training"** - this report gives the training plans for employees in a department. The year is sorted to ascending order.
4. **"Department T & D"** - this report combines training and skills onto one page (per employee) thus making a compact report. The employee skills on the left of the page can then be compared to the training plan on the right of the page. Training costs for each employee are given and a training budget for the department is also calculated on the last page.

### **General Reports**

1. **"Main Budget"** will report on the training budget for all departments on the database. The sorting is numerically for department ID but if this is changed to a codename, the sorting will be alphabetical. A budget total is given at the end of the report. A running total is also given on the right hand side of the report.
2. **"Courses"** will report on all courses that are on record.
3. **"Skill Types"** will show all skills in alphabetical order.
4. **"General Staff"** shows all employees in their respective departments (in ascending order).

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## **Appendix P: The Export Initiative**

### **Briefing on Changes To Come**

#### NOTICE TO ALL EMPLOYEES

#### PLASCON CAPE TOWN

Plascon Paints (Pty) Limited is continually reviewing and assessing all its operations to ensure that it remains competitive and viable.

Over a period of time the volumes manufactured out of the Plascon Epping site have been reducing. This has happened for various reasons and in particular the move of our high quality products such as the colour Expressions bases to the larger factories (water based to Luipaardsvlei and solvent based to Mobeni). The main reason for this was in order to gain from the economies of scale and the reduced Raw material and packaging costs at these high volume factories. Further movement of all Flagship and expressions bases to Luipaardsvlei and Mobeni will take place over the next 3 months.

This means that the Cape Town factory will have a baseline volume of 450 000 Lt. per month of production as opposed to the historical levels of approx. 900 000 Lt. per month. We are currently endeavouring to obtain export orders for the UK and other markets and with the exception of Plascon Flagship materials all export volumes will go through Plascon Cape Town.

Due to the reduced baseline volume and the export focus, the Cape Town factory will have to be restructured accordingly. Unfortunately this may result in some retrenchments.

Consultations with representatives of affected employees will begin next week.

During these consultations, employees will be given the opportunity to present any alternative business plans they may have.

We also look forward to future success with the export focus in Cape Town.

I Knight  
Operations Director.  
11<sup>th</sup> October 2000

## Engineering Aspects

### Design Overview

	Volume
Export Production (p.a)	2,690,000
Local Production (p.a)	5,318,000
Total Annual Production	8,008,000
Monthly Average	667,333
Seasonal Peak Volume (30% seasonal adjustment)	867,533

Export Production Includes	Litres per annum
China	740,000
Plascon UK	750,000
West Africa	1,200,000

### Key Benefits of the Proposal

- ❁ Improving space utilisation by moving all equipment into the Oil Plant will result in reduced property rental expenditure. The current water plant building will be vacated.
- ❁ Amalgamation of duplicate operations will reduce expenses and improve productivity. For example, each plant currently has two box making operations, two labelling operations, two pot cleaning operations etc. These operations will be amalgamated in the course of this project.
- ❁ Concentration of manufacturing facilities will improve management control of the entire operation and shorten communication lines.
- ❁ Improved workflow through the Oil plant will reduce materials handling costs.
- ❁ A new compressed air reticulation system in the oil plant has the capacity to supply the required quantity of clean air to the water-based equipment. This equipment is currently fed by a hydrovane, which is very old and in need of replacement. Clean air supply will reduce maintenance and breakdown expenses on water-based equipment.
- ❁ The dust extraction equipment in the Water plant will be more effectively utilised in the Cowles section of the Oil Plant. The current fume extraction equipment in this area cannot cope with certain powders and improved filtration is required.
- ❁ Ventilation improvements in the pot washing area of the oil plant will also be extended to the washing of water based equipment. The water-based pot washing area is unventilated at present.
- ❁ Loading of the varishears in the Water plant is difficult due to the lack of materials handling equipment. The new plant layout caters for bulk bag loading of water-based paints. This will lead to productivity improvements and reduce the risk of back injuries.
- ❁ The automatic emulsion and water batching system in the Oil plant is underutilised and this type of operation is also not available in the Water plant at present. By moving the water-based machinery into the Oil plant, the utilisation of this equipment will be increased. This will lead to reduce batching error and increased productivity through more efficient use of labour.
- ❁ The new layout will allow for flexible manufacturing upto a maximum of 50 000 l/day. This is in line with the vision for a flexible factory that can serve also as a contingency for strikes, product launches and other such events.
- ❁ The location of the Ropaque storage tank at the Oil Plant will reduce materials handling costs in water-based manufacture.

## **Appendix Q: Activity Based Costing – Introduction.**

The basic distinction between traditional cost accounting and ABC is as follows: Traditional cost-accounting techniques allocate costs to products based on attributes of a single unit. Typical attributes include the number of direct labour hours required to manufacture a unit, Purchase cost of merchandise resold, or number of days occupied. Allocations, therefore, vary directly with the volume of units produced, cost of merchandise sold, or days occupied by the customer. In contrast, ABC systems focus on activities required to produce each product or provide each service based on each product or service's consumption of the activities.

Using ABC, overhead costs are traced to products and services by identifying the resources, activities, and their costs and quantities to produce output. A unit of output (a driver) is used to calculate the cost of each activity. Cost is traced to the product or service by determining how many units of output each activity consumed during any given period of time.

ABC does not only apply to manufacturing organizations: it is also appropriate for service organizations such as financial institutions, medical care providers, and government units. In fact, some banking organizations have been applying the concept for years under a different name - unit costing. Unit costing is used to calculate the cost of banking services by determining the cost and consumption of each unit of output of functions required to deliver the service.

## CHAPTER 3

## GENERAL PROVISIONS

20. Offences  
 21. Proof of accuracy of statement  
 22. Regulations  
 23. Amendment of Skills Development Act  
 24. Short title and commencement

## SCHEDULE

## AMENDMENT OF SKILLS DEVELOPMENT ACT

## CHAPTER 1

## ADMINISTRATION, IMPOSITION AND RECOVERY OF LEVY

## Definitions

1. In this Act, unless the context otherwise indicates—  
 "approved body" means the body approved by the Minister in terms of section 7(1)(b) to collect the levy on behalf of a SETA;  
 "Commissioner" means the Commissioner for the South African Revenue Service, established by section 2 of the South African Revenue Service Act, 1997 (Act No. 34 of 1997);  
 "Director-General" means the Director-General of Labour;  
 "employee" includes an employee as defined in the Fourth Schedule to the Income Tax Act;  
 "employer" includes an employer as defined in the Fourth Schedule to the Income Tax Act;  
 "Income Tax Act" means the Income Tax Act, 1962 (Act No. 58 of 1962);  
 "interest" means any interest payable in terms of section 11;  
 "levy" means the skills development levy referred to in section 3;  
 "Minister" means the Minister of Labour;  
 "National Skills Authority" means the National Skills Authority, established by section 4 of the Skills Development Act;  
 "National Skills Fund" means the National Skills Fund, established by section 27(1) of the Skills Development Act;  
 "penalty" means any penalty payable in terms of section 12;  
 "prescribed" means prescribed by regulation in terms of section 22;  
 "sector" means a sector as determined by the Minister in terms of section 9(2) of the Skills Development Act;  
 "SETA" means a sector education and training authority, established by section 9(1) of the Skills Development Act;  
 "Skills Development Act" means the Skills Development Act, 1998 (Act No. 97 of 1998);  
 "this Act" includes any regulation made in terms of section 22, but does not include the footnotes.

## Administration of Act

2. (1) Subject to subsection (2), the Director-General must administer this Act.  
 (2) The Commissioner must administer the provisions of the Act in so far as it relates to the collection of the levy payable to the Commissioner in terms of this Act.  
 (3) The Director-General may delegate any part of the administration of this Act, contemplated in subsection (1), to the executive officer of a SETA.  
 (4) A delegation in terms of subsection (3)—

- (a) is subject to the conditions the Director-General determines;  
 (b) must be in writing;  
 (c) does not prevent the Director-General from performing the part of the administration so delegated; and  
 (d) may at any time be withdrawn in writing.

## Imposition of levy

3. (1) Every employer must pay a skills development levy from—  
 (a) 1 April 2000, at a rate of 0.5 per cent of the leviable amount; and  
 (b) 1 April 2001, at a rate of one per cent of the leviable amount.  
 (2) Despite subsection (1), the Minister may, in consultation with the Minister of Finance and the Minister for Provincial Affairs and Constitutional Development and by notice in the *Gazette*, impose a skills development levy on every municipality, as defined in section 10B of the Local Government Transitional Act, 1993 (Act No. 209 of 1993), or any group category or type of municipality, which must be determined on the leviable amount at a rate specified in that notice determined in accordance with subsection (3).  
 (3) The aggregate of the levies collected from a municipality by virtue of a notice in terms of subsection (2) and budgetary allocations for training purposes to that municipality, must from—  
 (a) 1 April 2000, be less than 0.5 per cent of the leviable amount;  
 (b) 1 April 2001, be less than one per cent of the leviable amount; and  
 (c) 1 April 2002, not be less than one per cent of the leviable amount.  
 (4) For the purposes of subsections (1), (2) and (3), but subject to subsection (5), the leviable amount means the total amount of remuneration, paid or payable, or deemed to be paid or payable, by an employer to its employees during any month, as determined in accordance with the provisions of the Fourth Schedule to the Income Tax Act for the purposes of determining the employer's liability for any employees' tax in terms of that Schedule, whether or not such employer is liable to deduct or withhold such employees' tax.<sup>1</sup>  
 (5) The amount of remuneration referred to in subsection (4) does not include any amount—  
 (a) paid or payable to any person contemplated in paragraphs (c) and (d) of the definition of "employee" in paragraph 1 of the Fourth Schedule to the Income Tax Act, to whom a certificate of exemption has been issued in terms of paragraph 2(5)(a) of that Schedule;  
 (b) paid or payable to any person by way of any pension, superannuation allowance or retiring allowance;  
 (c) contemplated in paragraphs (a), (d), (e) or (eA) of the definition of "gross income" in section 1 of the Income Tax Act;  
 (d) payable to a learner in terms of a contract of employment contemplated in section 18(3) of the Skills Development Act.  
 (6) Despite subsection (1), on the request of a SETA, the Minister may, in consultation with the Minister of Finance and by notice in the *Gazette*, determine from time to time a rate and basis for the calculation of a levy payable by employers within the jurisdiction or a part of the jurisdiction of a SETA, different from the rate and basis contemplated in subsection (1)(a) or (b), as the case may be, but subject to subsection (7).  
 (7) The rate and basis determined in a notice in terms of subsection (6) may not have the result that the amount of the levies collected by virtue of such notice is less than the amount of the levies which would have been collected, based on the rate and basis contemplated in subsection (1)(a) or (b), as the case may be.

1. This means that the remuneration paid to employees below the Income Tax threshold must be incorporated into the remuneration for determining the leviable amount in this Act.



exist, subject to subitems (5) to (7), as if that Act had not been repealed.

(2) Any body or institution, including a local government body, recognised as a training centre under section 9A of the Local Government Training Act immediately before the commencement of this Act, continues to be so recognised for a period of four months from that commencement as if the Local Government Training Act had not been repealed.

(3) Subject to subitem (7) (c), any levy imposed in terms of section 10 of the Local Government Training Act and in force immediately before the commencement of this Act, remains in force until 31 March 2000 unless withdrawn before that date by the Minister in terms of section 2 (3) of the Skills Development Levies Act as if the Local Government Training Act had not been repealed.

(4) Subject to subitem (7)--

- a. the powers conferred and duties imposed on the Training Board for Local Government Bodies established by section 2 of the Local Government Training Act may be exercised and must be performed by the Local Government Education and Training Board established in terms of section 12A of the Manpower Training Act; and
- b. all the assets, rights, liabilities and obligations of the Training Board for Local Government Bodies are hereby transferred to the Local Government Education and Training Board.

(5) The Director-General: Constitutional Development must administer the Fund and is the accounting officer for the Fund.

(6) The Minister for Provincial Affairs and Constitutional Development may, after consultation with the Local Government Education and Training Board, utilise the moneys in the Fund to fund any person or institution that in the opinion of the Minister can take action to develop the skills, knowledge, expertise or attitudes of a person elected to a municipal council or employed by a municipality.

(7) When a SETA is established for the local government sector--

- a. the Local Government Education and Training Board ceases to exist;
- b. the assets, rights, liabilities and obligations of that Training Board must be transferred to that SETA;
- c. the levy referred to in subitem (3) is regarded to be a levy imposed in terms of section 39 (1) of the Manpower Training Act as mentioned in item 10;
- d. the Fund ceases to exist; and
- e. the Director-General: Constitutional Development must transfer any balance of moneys in the Fund into the banking account of that SETA.

**15. Telecommunications sector** --(1) Subject to subitem (2), the Human Resources Fund referred to in section 78 (1) of the Telecommunications Act continues to exist as if sections 78 to 87 of that Act had not been repealed.

(2) The Fund referred to in subitem (1) ceases to exist--

- a. on 31 March 2000; or
- b. on the establishment of a SETA with jurisdiction in the telecommunications sector.

(3) If that Fund ceases to exist in terms of--

- a. subitem (2) (a), the balance of the money in the Fund must be transferred to the National

Skills Fund; or

- b. subitem (2) (b), the balance of the money in the Fund must be transferred to the SETA referred to in that subitem.

(4) Subject to subitem (5), the contributions contemplated in section 86 (1) of the Telecommunications Act which are in force immediately before the commencement of this Act, remain in force until 31 March 2000 as if that Act had not been repealed.

(5) If a SETA with jurisdiction in the telecommunications sector is established, the contributions contemplated in subitem (4) must be credited to that SETA.

**16. Exemptions from transfer duty, donations tax or any other tax** --Any transfer of assets or rights contemplated in this Schedule is exempt from transfer duty, donations tax or any other duty or tax.

35. **Delegation** --(1) The Minister may in writing delegate to the Director-General or any other officer of the Department any power or duty conferred or imposed on the Minister by this Act.

(2) The Director-General may, in writing, delegate to any officer of the Department any power or duty conferred or imposed on the Director-General by this Act.

(3) Any person to whom any power or duty has been delegated in terms of subsection (1) or (2) must exercise that power or perform that duty subject to the conditions that the person who made the delegation considers necessary.

(4) Any delegation in terms of subsection (1) or (2)--

- a. must be in writing;
- b. does not prevent the person who made the delegation from exercising the power or performing the duty so delegated; and
- c. may at any time be withdrawn in writing by that person.

36. **Regulations** --The Minister may, after consultation with the National Skills Authority, by notice in the Gazette, make regulations relating to any matter which--

- a. may or must be prescribed under this Act; and
- b. is necessary to prescribe in order to achieve the purposes of this Act.

37. **Repeal of laws and transitional provisions** --(1) The laws referred to Schedule 1 are hereby repealed to the extent specified.

(2) The repeal of those laws is subject to any transitional provision in Schedule 2.

38. **Act binds State** --This Act binds the State.

39. **Short title and commencement** --(1) This Act is called the Skills Development Act, 1998.

(2) This Act takes effect on a date to be determined by the President by proclamation in the Gazette.

#### Schedule 1

#### REPEAL OF LAWS

(Section 37 (1))

No. and year of law	Short title	Extent of repeal
Act No. 56 of 1981	Manpower Training Act, 1981	The whole
Act No. 62 of 1981	Guidance and Placement Act, 1981	The whole
Act No. 41 of 1985	Local Government Training Act, 1985	The whole
Act No. 106 of 1996	Telecommunications Act, 1996	Sections 78 to 87

#### Schedule 2

#### TRANSITIONAL PROVISIONS

(Section 37 (2))

1. **Definitions** --In this Part--

"Guidance and Placement Act" means the Guidance and Placement Act, 1981 (Act No. 62 of 1981).

"Local Government Training Act" means the Local Government Training Act, 1985 (Act No. 41 of 1985).

"Manpower Training Act" means the Manpower Training Act, 1981 (Act No. 56 of 1981); and

"Telecommunications Act" means the Telecommunications Act, 1996 (Act No. 103 of 1996).

2. **National Training Board** --Until the chairperson and other members of the National Skills Authority are appointed, the National Training Board, established in terms of section 3 of the Manpower Training Act, continues to exist and to perform the functions of the National Skills Authority.

3. **Manpower Development Fund** --All assets, rights, liabilities and obligations of the Manpower Development Fund, established by section 38 of the Manpower Training Act, are hereby transferred to the National Skills Fund.

4. **Training boards and apprenticeships** --(1) Subject to subitem (4), a training board, established and accredited in terms of sections 12A and 12B of the Manpower Training Act, continues to exist and perform its functions as if that Act had not been repealed, until 31 March 2000.

(2) When a training board ceases to exist on 31 March 2000--

- a. that training board must be wound up in terms of its constitution; and
- b. any apprentice under a contract of apprenticeship, registered by that training board and in existence immediately before the training board ceases to exist, must be dealt with as if the Manpower Training Act had not been repealed except that the Director-General must perform the functions of the training board until that contract of apprenticeship expires.

(3) The Minister must, by notice in the Gazette, abolish a training board before 31 March 2000 if--

- a. a SETA is established; and
- b. that SETA has jurisdiction over any part of an industry or area in respect of which the training board has been accredited in terms of section 12B of the Manpower Training Act.

(4) When a training board is abolished in terms of a notice referred to in subitem (3)--

- a. all the assets, rights, liabilities and obligations of the training board are transferred to the SETA designated in that notice; and
- b. any apprentice under a contract of apprenticeship, registered by the training board and in existence immediately before the training board is abolished, must, subject to subitem (6), be dealt with as if the Manpower Training Act had not been repealed except that that SETA

subsection (3) that the SETA or the Director-General, as the case may be, considers necessary.

(5) The SETA or the Director-General must monitor the skills programmes funded by the SETA or the Director-General, as the case may be.

(6) A SETA or the Director-General that has made funds available for a skills programme may withhold funds or recover any funds paid if the SETA or the Director-General, as the case may be, is of the opinion that--

- a. the funds are not being used for the purpose for which they were made available;
- b. any term or condition of the funding is not complied with; or
- c. the SETA or the Director-General, as the case may be, is not satisfied that the training is up to standard.

**21. Disputes.**--Any party to a dispute about the application or interpretation of--

- a. any term or condition of funding referred to in section 20 (4); or
- b. any provision of this Chapter.

may refer the dispute to the Labour Court for adjudication.

## CHAPTER 6 INSTITUTIONS IN DEPARTMENT OF LABOUR

**22. Skills Development Planning Unit.**--(1) Subject to the laws governing the public service, the Director-General must--

- a. establish a Skills Development Planning Unit in the Department; and
- b. provide the Unit with the personnel and financial resources necessary for the performance of its functions.

(2) The functions of the Skills Development Planning Unit are--

- a. to research and analyse the labour market in order to determine skills development needs for--
  - i. South Africa as a whole;
  - ii. each sector of the economy; and
  - iii. organs of state;
- b. to assist in the formulation of--
  - i. the national skills development strategy; and
  - ii. sector skills development plans; and
- c. to provide information on skills to--
  - i. the Minister;
  - ii. the National Skills Authority;
  - iii. SETAs;
  - iv. education and training providers; and
  - v. organs of state.

**23. Employment services.**--(1) Subject to the laws governing the public service, the Director-General must--

- a. establish labour centres in the Department; and
- b. appoint such number of persons in the public service at each centre as is necessary to

perform the functions of that centre.

(2) The functions of those labour centres are--

- a. to provide employment services for workers, employers and training providers, including improvement of such services to rural communities;
- b. to register work-seekers;
- c. to register vacancies and work opportunities;
- d. to assist prescribed categories of persons--
  - i. to enter special education and training programmes;
  - ii. to find employment;
  - iii. to start income-generating projects; and
  - iv. to participate in special employment programmes; and
- e. to perform any other prescribed function related to the functions referred to in paragraphs (a) to (d).

(3) The Minister may, after consulting the National Skills Authority, by notice in the Gazette, require each employer to notify a labour centre in the prescribed manner of--

- a. any vacancy that employer has; and
- b. the employment of any work-seeker referred by that labour centre.

**24. Registration of persons that provide employment services.**--(1) Any person who wishes to provide employment services for gain must apply for registration to the Director-General in the prescribed manner.

(2) The Director-General must register the applicant if satisfied that the prescribed criteria have been met.

(3) If the Director-General--

- a. registers an applicant, the prescribed certificate must be issued to that person; or
- b. refuses to register an applicant, the Director-General must give written notice of that decision to the applicant.

(4) A registered employment service must comply with the prescribed criteria.

**25. Cancellation of registration of employment service.**--(1) Subject to this section, the Director-General may cancel the registration of an employment service if satisfied that the employment service is not complying with the prescribed criteria.

(2) If the Director-General has reason to believe that an employment service is not complying with the prescribed criteria and accordingly that its registration should be cancelled, the Director-General must, before cancelling its registration--

- a. notify the service of the intention to cancel registration and the reasons for doing so;
- b. give the service 30 days from the date of the notice to make representations on why its registration should not be cancelled; and
- c. take those representations into account in reaching a decision.

(3) If the Director-General cancels the registration of an employment service, the Director-General must give written notice of that decision to the employment service.

**14. Finances of SETA.--**(1) A SETA is financed from--

- a. the skills development levies collected in its sector;
- b. moneys paid to it from the National Skills Fund;
- c. grants, donations and bequests made to it;
- d. income earned on surplus moneys deposited or invested;
- e. income earned on services rendered in the prescribed manner; and
- f. money received from any other source.

(2) The money received by a SETA must be paid into a banking account at any registered bank and may be invested only in--

- a. savings accounts, permanent shares or fixed deposits in any registered bank or other financial institution;
- b. internal registered stock contemplated in section 21 (1) of the Exchequer Act, 1975 (Act No. 66 of 1975);
- c. a unit trust scheme managed by a company which has been registered as a management company in terms of section 4 or 30 of the Unit Trusts Control Act, 1981 (Act No. 54 of 1981); and
- d. any other manner approved by the Minister.

(3) The moneys received by a SETA may be used only in the prescribed manner and to--

- a. fund the performance of its functions; and
- b. pay for its administration within the prescribed limit.

(4) In each financial year, ending on the prescribed date, every SETA must, at a time determined by the Minister, submit to the Minister a statement of the SETA's estimated income and expenditure for the following financial year.

(5) Every SETA must, in accordance with the standards of generally accepted accounting practice--

- a. keep proper record of all its financial transactions, assets and liabilities; and
- b. within six months after the end of each financial year, prepare accounts reflecting income and expenditure and a balance sheet showing its assets, liabilities and financial position as at the end of that financial year.

(6) The Auditor-General must--

- a. audit the accounts, financial statements and financial management of a SETA; and
- b. report on that audit to the SETA and to the Minister and in that report express an opinion as to whether the SETA has complied with the provisions of this Act, and its constitution, relating to financial matters.

**15. Taking over administration of SETA.--**(1) The Minister may, after consultation with the National Skills Authority, by notice in the Gazette, direct the Director-General to appoint an administrator to take over the administration of a SETA if the Minister is of the opinion that--

- a. the SETA fails to perform its functions;
- b. there is mismanagement of its finances; or
- c. its membership no longer substantially represents the composition contemplated in section

11.

(2) In that notice the Minister--

- a. must determine the powers and duties of the administrator appointed in terms of subsection (1);
- b. may suspend or replace one or more members of the SETA for a reason contemplated in subsection (1) (a), (b) or (c);
- c. may suspend the operation of the constitution of the SETA; and
- d. may, in the prescribed manner, transfer funds in the SETA's bank account to the National Skills Fund.

(3) If a notice is published in terms of subsection (1), the Minister may, to ensure that the SETA resumes the performance of its functions--

- a. amend its constitution;
- b. reinstate any of its members; and
- c. withdraw or amend any provision of the notice contemplated in subsection (2) on such conditions as the Minister considers appropriate.

## CHAPTER 4 LEARNERSHIPS

**16. Learnerships.--**A SETA may establish a learnership if--

- a. the learnership consists of a structured learning component; the learnership includes practical work experience of a specified nature and duration;
- b. the learnership would lead to a qualification registered by the South African Qualifications Authority and related to an occupation; and
- c. the intended learnership is registered with the Director-General in the prescribed manner.

**17. Learnership agreements.--**(1) For the purposes of this Chapter, a "learnership agreement" means an agreement entered into for a specified period between--

- a. a learner;
- b. an employer or a group of employers (in this section referred to as "the employer"); and
- c. a training provider accredited by a body contemplated in section 5 (1) (a) (ii) (bb) of the South African Qualifications Authority Act or group of such training providers.

(2) The terms of a learnership agreement must oblige--

- a. the employer to--
  - i. employ the learner for the period specified in the agreement;
  - ii. provide the learner with the specified practical work experience; and
  - iii. release the learner to attend the education and training specified in the agreement;
- b. the learner to--
  - i. work for the employer; and
  - ii. attend the specified education and training; and
- c. the training provider to provide--
  - i. the education and training specified in the agreement; and
  - ii. the learner support specified in the agreement.

(3) A learnership agreement must be in the prescribed form and registered with a SETA in the

each from the members to be appointed to represent--

- a. organised labour;
- b. organised business;
- c. organisations of community and development interests; and
- d. the interests of the State.

(4) A member of the Authority holds office for a period of three years and is eligible for re-appointment.

(5) A member of the Authority vacates office if that member--

- a. is removed from office by the Minister as contemplated in subsection (6); or
- b. resigns by written notice addressed to the Minister.

(6) The Minister may remove a member of the Authority--

- a. on the written request of the body that nominated that member in terms of subsection (2);
- b. for serious misconduct;
- c. for permanent incapacity;
- d. for absence from three consecutive meetings of the Authority--
  - i. without the prior permission of the Authority; or
- e. unless the member shows good cause; or
- f. for engaging in any activity that may undermine the functions of the Authority.

(7) If a member of the Authority vacates office before the expiry of the period of office, the Minister must, in terms of subsection (2), appoint a new member for the unexpired portion of that period

(Date of commencement of s. 6: 2 February, 1999.)

**7. Constitution of National Skills Authority.**--(1) The National Skills Authority must, as soon as possible after the appointment of its members, adopt its constitution.

(2) Subject to this Act, the constitution of the Authority--

- a. must provide for--
  - i. procedures for the nominations of members of the Authority referred to in section 6 (2) (a), (b), (c) and (g);
  - ii. the establishment and functioning of committees, including an executive committee;
  - iii. subject to subsection (3), the rules for convening and conducting of meetings of the Authority and its committees, including the quorum required for and the minutes to be kept of those meetings;
  - iv. the voting rights of the different members and the manner in which decisions are to be taken by the Authority and its committees;
  - v. a code of conduct for the members of the Authority;
  - vi. the determination through arbitration of any dispute concerning the interpretation or application of the constitution; and
  - vii. subject to subsections (4) and (5), a procedure for amending the constitution and advising the Minister on regulations to be made; and
- b. may provide for--
  - i. the delegation of powers and duties of the Authority to its members, committees and employees, provided that the Authority may impose conditions on the delegation, may

not be divested of any power or duty by virtue of the delegation and may vary or set aside any decision made under any delegation; and

- ii. any other matter necessary for the performance of the functions of the Authority.

(3) At least 30 days notice must be given for a meeting of the Authority at which an amendment of the constitution or a regulation to be made is to be considered

(4) A supporting vote of at least two thirds of the Authority's members and the approval of the Minister is required for an amendment to its constitution.

(5) A supporting vote of at least two-thirds of the Authority's members is required for advising the Minister on regulations to be made.

(6) Despite subsection (2) (a) (i), the Minister must determine the procedure for the nominations for the first appointment of members of the Authority referred to in section 6 (2) (a), (b), (c) and (g).

(Date of commencement of s. 7: 2 February, 1999.)

**8. Remuneration and administration of National Skills Authority.**--(1) A member of the National Skills Authority who is not in the full-time employment of the State may be paid the remuneration and allowances determined by the Minister with the approval of the Minister of Finance.

(2) Subject to the laws governing the public service, the Director-General must--

- a. appoint a person to be the executive officer of the National Skills Authority who will, upon such appointment, be in the employ of the public service; and
- b. provide the Authority with the personnel and financial resources that the Minister considers necessary for the performance of its functions.

(Date of commencement of s. 8: 2 February, 1999.)

### CHAPTER 3 SECTOR EDUCATION AND TRAINING AUTHORITIES

**9. Establishment of SETA.**--(1) The Minister may, in the prescribed manner, establish a sector education and training authority with a constitution for any national economic sector.

(2) The Minister must determine a discrete sector for the purposes of subsection (1) by reference to categories of employers and for the purposes of that determination take into account--

- a. the education and training needs of employers and employees that--
  - i. use similar materials, processes and technologies;
  - ii. make similar products; or
  - iii. render similar services;
- b. the potential of the proposed sector for coherent occupational structures and career pathing;
- c. the scope of any national strategies for economic growth and development;
- d. the organisational structures of the trade unions, employer organisations and government in closely related sectors;
- e. any consensus that there may be between organised labour, organised employers and relevant government departments as to the definition of any sector; and
- f. the financial and organisational ability of the proposed sector to support a SETA.

**"Basic Conditions of Employment Act"** means the Basic Conditions of Employment Act, 1997 (Act No. 75 of 1997);

**"Department"** means the Department of Labour;

**"Director-General"** means the Director-General of Labour;

**"employee"** means--

- a. any person, excluding an independent contractor, who works for another person or for the State and who receives, or is entitled to receive, any remuneration; or
- b. any other person who in any manner assists in carrying on or conducting the business of an employer, and "employed" and "employment" have corresponding meanings;

**"employment services"** means the provision of the service of--

- a. advising or counselling of workers on career choices either by the provision of information or other approaches;
- b. assessment of work-seekers for--
  - i. entry or re-entry into the labour market; or
  - ii. education and training;
- c. the reference of work-seekers--
  - i. to employers to apply for vacancies; or
  - ii. to training providers for education and training;
- d. assistance of employers by--
  - i. providing recruitment and placement services;
  - ii. advising them on the availability of work-seekers with skills that match their needs;
  - iii. (advising them on the retrenchment of employees and the development of social plans; or
- e. any other prescribed employment service;

**"government department"** means any department or organisational component referred to in Schedule 1 or 2 of the Public Service Act, 1994 (Proclamation No. 103 of 1994);

**"Labour Court"** means the Labour Court established by section 151 of the Labour Relations Act, 1995 (Act No. 66 of 1995);

**"Minister"** means the Minister of Labour;

**"National Skills Authority"** means the National Skills Authority established by section 4;

**"national skills development policy"** means the national skills development policy referred to in section 5 (1) (a) (i);

**"national skills development strategy"** means the national skills development strategy referred to in section 5 (1) (a) (ii);

**"National Skills Fund"** means the National Skills Fund established by section 27;

**"NEDLAC"** means the National Economic Development and Labour Council established by section 2 of the National Economic Development and Labour Council Act, 1994 (Act No. 35 of 1994);

1994);

**"prescribed"** means prescribed by regulation.

**"regulation"** means a regulation made and in force in terms of section 36;

**"SETA"** means a sector education and training authority established in terms of section 9 (1);

**"Skills Development Levies Act"** means national legislation imposing levies for skills development;

**"skills development levies"** means the skills development levies payable in terms of the Skills Development Levies Act;

**"South African Qualifications Authority"** means the South African Qualification Authority established by section 3 of the South African Qualifications Authority Act;

**"South African Qualifications Authority Act"** means the South Africa Qualifications Authority Act, 1995 (Act No. 58 of 1995);

**"this Act"** includes any regulations but does not include the footnotes; and

**"worker"** includes an employee, an unemployed person and a work-seeker.

(Date of commencement of s. 1: 2 February, 1999.)

## 2. Purposes of Act.--(1) The purposes of this Act are--

- (a) to develop the skills of the South African workforce--
  - i. to improve the quality of life of workers, their prospects of work and labour mobility;
  - ii. to improve productivity in the workplace and the competitiveness of employers;
  - iii. to promote self-employment; and
  - iv. to improve the delivery of social services;
- (b) to increase the levels of investment in education and training in the labour market and to improve the return on that investment;
- (c) to encourage employers--
  - i. to use the workplace as an active learning environment;
  - ii. to provide employees with the opportunities to acquire new skills;
  - iii. to provide opportunities for new entrants to the labour market to gain work experience; and
  - iv. to employ persons who find it difficult to be employed;
- (d) to encourage workers to participate in learnership and other training programmes;
- (e) to improve the employment prospects of persons previously disadvantaged by unfair discrimination and to redress those disadvantages through training and education;

The levy must be paid over to SARS (after registration), not later than SEVEN days after the end of the month in respect of which the levy is payable, under cover of a SDL 201 return form. The first levy amount is therefore payable on or before 7 May 2000.

**Is there any interest and penalties leviable on late/ non-payment of the levy?**

Yes. Interest is payable at the PRESCRIBED RATE (Income Tax Purposes) on late payments. A penalty of 10 PERCENT will be levied on the unpaid amount.

**What happens to the levies paid?**

The levies paid to SARS will be deposited into a special fund from where 80% of it will be distributed to the relevant SETAs as indicated on the registration forms, and the balance (20%) will be paid into the National Skills Fund. SETAs will in turn pay levy-grants to qualifying employers, while the National Skills Fund will fund skills development projects not within the scope of SETAs.

**What if I am training already?**

The levy still has to be paid but you may be eligible for a grant.

**Can I recover any of this levy payment by means of grants?**

In the first year of the levy grant scheme you can recover in grants a minimum of 50% of the levy you paid on condition that you meet all the requirements for the different grants. The details of these requirements will be issued to you in April 2000 by your SETA.

**Where can I obtain further information on my obligations as an employer regarding levy payments in terms of the Skills Development Levies Act?**

The Department of Labour and the SARS have drafted a SDL 10 guideline containing comprehensive details in this regard. This guide will be forwarded to all registered employers.

**Who do I contact if I have questions about the collection of the levy in terms of the Skills Development Levies Act?**

Any SARS office, Department of Labour Head Office and Provincial Offices.

**For more information**

Watch the media for further information on the implementation of the levy grant scheme from January 2000. Your SETA, once operational, will also provide you with assistance.

For specific assistance direct enquiries to:

Department of Labour:  
Tel: (012) 309-4000  
Fax: (012) 320-0792  
Email: [skills.development@labour.gov.za](mailto:skills.development@labour.gov.za)

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## Private Higher Education Institutions

PLEASE FIND ATTACHED THE CORRECT and latest list. Please note the major differences those offered registration.

MINISTRY OF EDUCATION

REGISTRATION OF PRIVATE HIGHER EDUCATION INSTITUTIONS

THESE LISTS ARE UPDATED DAILY AS NECESSARY

LAST UPDATE 31 March 2000

There has been considerable public interest in the registration of private higher education. Education has been processing applications for registration from private higher education. The registration process is also complemented by preliminary accreditation, conducted by the South African Qualifications Authority (SAQA), for both learning programmes and institutional capacity. The Department received over 700 inquiries for application to register, and this number is growing daily. Private higher education institutions, which include local and foreign institutions, to be registered as of 1 January 2000.

As the Department of Education and the South African Qualifications Authority have completed accreditation and registration, the Minister of Education announces the following:

1. The following institutions have been conditionally registered by the Department of Education Institutions in accordance with sections 53, 60 and 64 of the Higher Education Act 1997:

### Institutions Conditionally Registered

1. Academy of Financial Markets
2. Cape Bible Training Centre
3. De Montford University (South Africa)
4. Die Evangelies Gerformeerde Bybelkollege
5. Durbanville Kollege
6. Giyani College of Technology and Management
7. Haute Couture School of Fashion Design
8. Jill Farquharson College of Physical and Beauty Therapy
9. Kelly-Greenoaks Secretarial & Business College
10. Madge Wallace College of Beauty Therapy
11. Promat College of Education
12. Sonett Skoonheidsakademie
13. Southern College/Suiderkollege
14. St. Augustine College of South Africa
15. St. John Vianney Seminary
16. Stellenbosch Academy of Health and Skin Care Therapy
17. Train-A-Child

2. The following institutions have been offered conditional registration by the Department of Education Institutions in accordance with sections 53, 60 and 64, or section 54 (3) of the Higher Education Act 1997:

### Institutions offered Conditional Registration

1. AAA School of Advertising
2. Afrikaanse Protestantse Akademie
3. Beautiko Academy of Beauty
4. Business School of the Netherlands (South Africa)
5. Cedar College of Education
6. Centre for Creative Education
7. Complementary Health Centre
8. Contemporary Music College
9. Cornerstone Christian College
10. Durban Computer College Training Center
11. Global School of Business
12. ICESA City Campus
13. The Hotel School (Sandton Campus)
14. Inscape Design College
15. Midrand Campus
16. Monash University (South Africa)
17. MSC Private College (Head Office Only)
18. Northern Cape Career Training College
19. Pretoria Marketing College
20. Production Management Institute of Southern Africa

3. The following institutions have NOT been registered in accordance with sections 53 ; Education Act 1997. These institutions are to inform current students of their registration. These institutions have re-applied or appealed, while others are Further Education and Training Institutions.

